

# MANUFACTURERS' RECORD.

A WEEKLY SOUTHERN INDUSTRIAL, RAILROAD AND FINANCIAL NEWSPAPER.

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## Manufacturers' Record.

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THOMAS P. GRASTY, Vice-President.  
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### COPY FOR ADVERTISEMENTS.

Advertising copy (changes or new advertisements) should reach us Saturday Morning to insure insertion in the issue of the following week.

For the first issue in the month we should receive copy by Friday Morning of the week preceding.

The Southwest—a great empire in extent and resources—is the scene of such activity in railroad construction as has not been witnessed anywhere in the United States since the days of 1879-80, when railroad building was at its highest point. Coincident with this era of railroad activity, with old systems building new lines and new companies projecting long roads as well as short ones, there are indications of a great advance in manufacturing, mining and financial interests. In order that it may the more fully cover the whole Southwest and be in closer touch with its business life the Manufacturers' Record has located a special correspondent in St. Louis, whose opening letter, published last week, and whose survey of the railroad situation in this issue will give our readers an idea of the broad scope of the work to be done in that field. Mr. C. S. Crane, general passenger agent of the Wabash Railroad Co., writing from St. Louis under date of June 2, referring to this move, says:

I believe this pioneering enterprise of yours to be a move in the right direction, and I am especially attracted by the character of the letter, which I have fully read. There is without doubt much to be said concerning the peculiar advantage and growth of the Southwestern country, and many a letter similar to the one referred to might with advantage be published without exhausting such a fruitful subject. The Southwest is truly coming to the front.

In celebration of its fourteenth anniversary the Birmingham News issued last week an industrial art edition of 100 pages which will be regarded as a model of journalistic enterprise and a striking record of newspaper progress. Within its 700 columns it condensed a mass of statistics and other information of permanent value about the ad-

vance of Birmingham from a wayside station to a potent industrial and commercial center, of the district tributary to it, and of individual industrial trade and transportation interests. This feature will make the special edition really a work of reference for students of industrial conditions in Alabama. At the same time it is evidence of the prosperity of the city shared by the Birmingham News, while the fact that the paper is a product of its own editorial and business force and mechanical plant, with the exception of assistance given in the handling of the foreign advertising matter, shows that the News has taken advantage of that prosperity.

### HANDLING SOUTHERN TIMBER.

Tennessee is one of the Southern States to be benefited by the establishment of the Appalachian Park, with its lessons in forest handling and forest reservation. It will undoubtedly give an impetus to the movement, already effective to some extent in that and other States, for practical and economic forestry. The example of the national government may be expected to be followed by the State and by individuals. Meanwhile, attention is being given the subject by private land-owners, and in Forestry and Irrigation Mr. R. W. Powell of Tennessee sets forth certain valuable facts and suggestions which, if properly considered, ought to contribute to the general welfare. Three or four years ago Mr. Powell made an examination of the chestnut-oak resources of North Carolina, Georgia, Alabama and Tennessee. He found that to obtain bark for tanning millions of feet of chestnut-oak timber were cut each year, the general practice being to cut the timber for the sake of the bark alone and to leave the trunks of the trees to decay. Mr. Powell believes that this timber could be cheaply treated in the woods in such a way as to make it worth while to be handled by lumbermen in larger quantities, and he also suggests the use of the timber for railroad ties, for which it is even better than white oak if cut under equally good conditions. Mr. Powell also points to the possibilities of hemlock and chestnut as material for wood pulp, and of wind-shaken chestnut as fuel for brickmaking. Especially does he protest against the skinning of the most valuable white oak from timber lands by the stove and spoke manufacturers. He insists that the latter should exercise more care in lumbering, and pointing to High Point, N. C., which in less than twenty years has become an important site of the furniture industry, shipments now aggregating from twelve to twenty-five carloads daily, he says:

What is being done in High Point, N. C., can be even better done in many places in this State if the right men will take hold of the problem. We need more diversified industries in Tennessee, and to that end should take care of our natural resources and utilize them to the fullest extent, and do what we can to bring the furniture plants of the North to us rather than send our raw material to them. The laws of the State are

probably liberal enough with regard to manufacturing industries using home products, and I am rather inclined to think that what is needed more than anything else at this time is a little more confidence and foresight on the part of owners of forest lands.

In addition to the above suggestions, many others could be given along somewhat similar lines, but each man for himself, as interested, can ask what he can do to make his own future better, while at the same time not forgetting that he is but part of a great Commonwealth. We have the advantage of the economic history of other communities, both here and abroad, and the sooner we put ourselves in complete touch with our progressive neighbors the sooner we will get back into our former relative position with our sister Commonwealths.

Truly the South has the advantage of the experience of other sections in many lines. Part of that experience, and, perhaps, the most notable part, has been the recklessness in handling forest resources to the absolute destruction of extensive areas of timber growth. This loss has turned the lumbermen toward the South, and not always has experience taught its most valuable lesson, that a regular and practically enduring profit is much more to be desired for the good of the section and of individuals than quick and large profits to be enjoyed only for a comparatively short while. The South has become the last resort of the lumbermen in the United States. Properly handled, its timber is sufficient to meet demands for all time to come, particularly with the extension of the use of iron and steel in construction and of petroleum as fuel. If the wasteful methods which have prevailed elsewhere are permitted in the South, the end will soon come. Wisdom and business sense ought to make general the practices of economic lumbering which have been adopted by corporations in Texas, Tennessee, Georgia and other States, while the general wealth, based upon Southern forests, may be enhanced by the building up of other High Points, so that Southern lumber shall be sold at its highest price. Forest products are worth a great deal more money as furniture, vehicles and implements than as logs and boards.

### COTTON NORTH AND SOUTH.

In submitting the thirty-second annual report of the New York Cotton Exchange President S. T. Hubbard says that the manufacturing interests of the South are advancing at so rapid a rate that at the present ratio of increase the mills of the South will soon consume as much cotton as do the mills of the Northern spinners. It will be remembered that last year the Southern mills took 45 per cent. of the cotton taken by American mills. Up till May 30, this year, of the total domestic spinners' takings, 3,406,677 bales, the Southern mills had taken 1,423,579 bales, or nearly 42 per cent. The advance of the Southern mills during the past ten years especially, and the present activity in increasing the spindle capacity of the South, are enough to warrant a belief that Southern mills will soon not only be consuming as

much cotton as Northern spinners, but even more. Still, the output of Southern mills represents hardly a third of the value of the output in the whole country, the greater value given to cotton by the Northern mills being a consequence of the higher quality of goods produced. Some years must elapse before the value of goods produced in the South shall equal the value of Northern goods. But present tendencies are all in that direction.

### INDUSTRIAL STEPPING-STONES.

There is a publication in New York known as Social Service, and dealing largely in ideal theories, which has recently interested itself more or less in what is known as child labor in Southern mills. It has published articles dealing with that subject on a par with others which have appeared as a part of a set agitation against the Southern textile industry under the guise of philanthropy. But it apparently recognizes that there are two sides to the question—a fact which seems to be unknown or disregarded deliberately by agitators—and has printed a paper written by Mr. F. B. Gordon, a gentleman of Northern birth, now the president of the Columbus (Ga.) Manufacturing Co., and truly representative of all that is best in the Southern textile industry, in which he very clearly expresses the convictions held not only by Southern mill operators, but everybody else having the material and social interests of the South at heart, unbiased by abstract theory. Mr. Gordon points out that the opposition to proposed labor legislation is maintained by the mill-owners because they recognize in the sentimentality about child labor merely a means for opening the way for a flood of legislative enactments under which New England operators and operatives are now suffering, because Southern manufacturers are compelled to deal with conditions and not theories, and because they feel that the paid labor agitators in the South are backed by individuals who imagine that the South, because of its labor situation, is seriously affecting their business. Mr. Gordon makes these points:

Take the mill towns of the South, and you will find that the owners and managers of the cotton mills are doing more practical, telling work for the upbuilding and education of the wage-earning class (including the children) than all the agitators that Old England or New England would like to see stirring things up in this part of the moral vineyard.

The mill-owners do not feel that there is at the present time any crying demand on the part of the general public either for State supervision of cotton mills or any reason for spasms on the part of the paid agitators, the "newspaper preachers," or our gentle and zealous friends, the club women.

That the Southern cotton mill is a stepping-stone to better times for thousands of the poorer white population of the country districts is unquestionably true, as it is also true that Southern mill-owners are making no fight against organized labor, and in no part of the world is the relation between labor and capital more amicable.

There is nothing theoretical about these words of Mr. Gordon. The facts

he advances have long been recognized. Any one of them is, to the well-poised mind, of more value than a hundred hysterical views based upon conditions entirely different from those in the South. The agitation against Southern mills, like other social and economic agitations which are being forced upon the South, utterly neglect the very important consideration that in large measure the South industrially is in the position of the country half a century ago, and that natural evolution, rather than radical revolution, is demanded for the health of Southern employes and Southern employers. It refuses to see that industrial elysium cannot be reached in the South at one bound. Fifty years of agitation to that end in the North finds labor still very much beyond its pale. Indeed, it is a fair question to ask whether labor conditions in the North would not be better if labor had been permitted to advance naturally from one stepping-stone to another instead of being forced by agitation of theorists beyond the measure of its strength and capacity. That is the view held by thinking and observant men of the South who believe that labor has the right to organize equal to the right of capital, but at the same time that both labor and capital must be permitted to attend to their own business. They see in Southern labor's yielding to beguilement from without the opportunity for Southern labor to be used as a cat's-paw to its own detriment, and if a succinct illustration is required, they may point to the Augusta Chronicle's summary of the conclusion of the strike at the King mill, as follows:

It means an end to idleness and non-productiveness. It means an end to short rations from an inadequate commissary. It means an end to awaiting for remittances from the East that were to give a week to each operator, but which never came. It means receiving full pay on a regular payday. It means an end to eating the bread of charity, and the renewal of that independence which every breadwinner feels who earns his own living and asks charity of no man.

Some people have maintained that it was hard that the innocent operatives who had no part in the strike should have to be locked out and made to suffer because the operatives in one mill decide to strike.

At first that sounds like a very reasonable statement of the case. But is it a correct statement? Did the operators in the King mill really decide to strike, or did certain union leaders—leaders of a union that could dictate to the operators in all the mills—order the King mill operatives to strike?

Did not agitators from the outside come here and breed discontent and make trouble where there was none?

If the other mills had continued at work, could not the operatives in these other mills have supported the strikers indefinitely?

And if these agitators and union strikers could precipitate a strike in the King mill, where investigation both by millmen and operatives discloses that no grievance exists, could they not, in turn, have ordered a strike first in one mill and then in another, and disorganized the business in the mills of the Augusta district for month after month?

Conceding this, was it not equally just for the mill-owners to form a union to protect their interests? And was it not wiser to act in concert and meet the issue in all the mills at the same time, and have it all over at once, instead of having business disorganized in one mill after another, while the running mills supported the strikers who were fighting them?

Men who are looking for employment might well turn in the direction of Birmingham, Ala. A dispatch from that city says that common labor is in demand at the furnaces in Alabama, and labor agents are to be sent out to look for men to take up the work at the plants, though so far there has been no interruption at the plants on account of the shortage.

### Freedom for Railroads.

Mr. E. H. Harriman, president of the Southern Pacific Company, chairman of the board of directors of the Union Pacific Railroad, and chief power of various other railroad systems in the West and Southwest, has returned to New York from a three months' tour over the systems, and reports a better feeling of the public towards the railroads. He says:

"The antagonisms which formerly existed between the transportation companies and the public are gradually being eliminated, and there is a marked change in the attitude of the public toward transportation companies as compared with what existed in the past. The public understands that what affects the capacity of the transportation companies by improving their properties and conducting the transportation more economically, equally affects the public. The economies which ought to be practiced in the future by the transportation companies must be on the lines of closer alliance with each other, by combinations which will enable them to conduct the transportation on the lines upon which it can be the most economically done. Unless some such arrangement can be brought about, either the transportation companies must restrict their expenditures, employ less labor or at lower cost, or obtain a higher price for the commodity which they have to sell, which is transportation. But if by combination they can conduct their business on the lines of economy, in the end the public must get some of the benefit as well as the railroads, and in that way both the public and the transportation companies see that their interests lie in the same direction.

"I think the attitude of the officers of the railroads have taken toward the public in taking them more into their confidence than formerly, and the improved service that has been put on most of the lines, has eliminated much of the adverse feeling which existed in the past.

"There is much talk of the overcapitalization of railroads. There are miles and miles of reconstructed railroads which it costs \$100,000 a mile or more to build, and when we have to tunnel, of course, it takes sometimes as much as \$1,000,000 or \$1,200,000 a mile to save distance or eliminate grades and curves. Besides, when the railroads were built in the first instance the securities had to be issued so that the money could be raised under the conditions then prevailing, as the proposed railroads were not able to sell 4 per cent. bonds at a premium.

"At those times money had to be hired at the price which the market demanded, and therefore it is difficult to determine what railroad might be overcapitalized and what might not. I do not think any of us could work it out.

"The legislation of the future must be pro-railroad instead of anti-railroad, and it must develop confidence between the public and the transportation companies. I believe in combinations of lines, whereby the products can be transported on the lines on which it can be done most economically. You can transport over comparatively straight and level roads more cheaply than over crooked and mountainous roads. There must be some way given to compensate those high-grade lines. We could do it undoubtedly if we had the power, so that the transportation companies, as well as the public, would be benefited. What I want to bring about is a better feeling and a feeling of more confidence between the people we serve and ourselves.

"I do not know what the phrase 'community of interest' covers. What I believe in is 'common interest.' I never believed in 'community of interest.' We all have

one common interest—that is probably what the term 'community of interest' is meant to cover, but it does not express it. It is the common interest of the shipper and transporter, the employer and employed. I believe combinations must go on until entire systems are completed, but I think consolidation is a matter which none of us can forecast.

"The making of rates would be well taken care of if railroads could have the right to direct their business on economical lines. These are matters which should be left to the discretion of those in charge of the transportation. If we do direct the business on the lines on which it can be most economically done, we have no way to compensate the line from which we take it away. Combination is the right to agree among ourselves, so that we can more economically conduct business. It does not mean consolidation.

"Regarding the interstate commerce commission, I believe that commissions are things of the past. I do not think transportation companies should have to submit to dictation or control by bodies who do not know anything about transportation. I think now is the time for all of us to speak out what we think. Meet the thing face to face. Bodies formed for the purpose of controlling transportation should have in them representatives of the companies whose business is to be controlled.

"Regarding government ownership of railroads, I would not like to say anything that would appear to criticize or offer any expression as to what the effect might be on the transportation companies or the public. I do not believe that there will be another receivership period, at least not if the railroads are permitted to transact their business in a businesslike way. The receiverships will come because of excessive legislation, and the result of that would be restriction of all classes of business, because railroads are really the producers of a large amount of traffic which they themselves enjoy."

### THE BIRMINGHAM DISTRICT.

#### Stiff Market Looked For in the Next Twelve Months.

[Special Cor. Manufacturers' Record.] Birmingham, Ala., June 2.

The ironmakers of this district will soon fix a schedule of prices for 1903. In the meantime they are watching the anthracite strike with nervous interest, wondering what effect it will have upon the general business of the country, and consequently upon the iron trade.

The active demand for pig-metal up to this time and the strong tone of the market lead some of the sales agents to think buyers will stand a \$17 basis for the first half of next year. If the country continues prosperous, they say, high prices will certainly prevail. A manufacturer of large experience and conservative views said yesterday that he looked for a stiff market from July to July, and a declining market after the middle of 1903. The increased furnace capacity would, he thought, cause prices to soften a year hence, no matter what the condition of the country might be.

The car supply here is regular, and every day's furnace output clears the yards. The Tennessee Coal, Iron & Railroad Co. sold all it will make in 1902 early in the year. The Republic Iron & Steel Co. did practically the same. The Alabama Consolidated Coal & Iron Co. and the Sloss-Sheffield Steel & Iron Co. drew the line at the last quarter until a few weeks ago, when prices hardened on a No. 2 foundry basis. Three weeks ago they began to sell fall contracts freely for delivery to the end of the year.

Iron in 100 to 200-ton lots is in such

fierce demand that those who have it have no trouble in getting almost any price for immediate shipment. Seventeen and one-half has been the common figure for No. 2 foundry for a week or ten days past.

The Republic's new furnace at Thomas was lighted today, and the blast will be turned on day after tomorrow. Uncommon interest attaches to this furnace because it is the largest in the district, and far ahead of anything in Alabama in the way of modern construction and equipment. It has been a little over two years in building. Every economy that could be devised is seen in this new furnace. It has two cross-compound steeply condensing engines for blowing purposes, each of 1800 horse-power. They are the only engines of the kind in the South. The stoves are models, and the gas seal on the furnace stack is entirely new in this section. Its electric trolley system of running the ore cars from the bins to the big cars that go up the skip hoist is beyond anything in this line in the district. The bins have a capacity of 7000 tons, and are built on massive foundations of concrete that will stand for a hundred years or more.

The Republic is adding to its coke-oven plant, and in a few weeks it will have over 900 ovens in operation. And all the coke output will be needed for its three Thomas furnaces. The combined make of No. 1 and No. 2 is now over 400 tons a day. No. 3, the new furnace, is said to have a capacity of 300 tons, but if it overruns its capacity in the same proportion that its other furnaces do it will make 350 tons a day. With No. 3 furnace come new houses at Thomas, about eighty being in course of construction at this time.

The Messrs. Schuler have about completed their plans for two blast furnaces and a steel mill to be operated in connection with their Alabama Steel and Wire Works at Ensley, but they have not yet located the plant. A site will probably be selected within the next ten days. It is the intention of the Schulers to begin work on this new industry some time during July, and to push it rapidly to completion.

The Birmingham Southern Railroad Co. has just finished laying tracks to the Southern Car & Foundry Co.'s site at Wyham, adjoining Ensley, where the first steel car works in the South will be built. The material will be assembled with as little delay as possible, and Capt. J. M. Elliott, president of the Car & Foundry Company, says he expects to have the plant ready for operation before the end of the year. No industry in this district erected since the Tennessee Coal, Iron & Railroad Co.'s steel works will be of such far-reaching importance, perhaps, as this enterprise. It will turn out the finished product on a larger scale than any industry now here.

The De Bardeleben Coal & Coke Co., of which Mr. W. P. Pinckard is president and principal shareholder, is developing its coal property extensively, and this summer it will begin developing its rich ore mines. The company's coal and ore lands are in Tuscaloosa county, near the coal property of the Alabama Consolidated Coal & Iron Co. The company owns and operates a railroad from Dudley Station, on the Alabama Great Southern, to its coal mines, a distance of a mile and three-quarters, and it will extend this road two miles to its orebeds. Mr. Pinckard is also planning to build 200 coke ovens this summer.

The Sloss-Sheffield Company's No. 2 city furnace, which is being rebuilt, will be ready for blast by the first of July.

Albert T. Clifton of Waco, Texas, is endeavoring to organize a company to build a cotton mill.



# ST. LOUIS AS A RAILROAD CENTER.

## Arteries of Its Great Trade in the South, West and Southwest.

[Special Correspondence Manufacturers' Record.]

St. Louis, Mo., June 2.

"Large rivers run by big cities" is the inverted application of a trite fact made by the schoolboy in his history composition. When the railroads began to throw out their long arms to gather in the commerce of the country they naturally took first hold of the important trading centers which had been built up by the river traffic. Thus before the development of the interior St. Louis had railroads, and the lead she had as a river town has been vastly increased since.

But two other cities in the Union are ahead of St. Louis as a railroad center, and in another decade of development like the present she may come still nearer the first. St. Louis has practically fifteen separate railroad systems, although trains bearing the names of some twenty-five different roads run into the great world-beating union station here. These lines represent most of the important ownerships of American railways today, and give St. Louis direct connection with every quarter of the nation.

How important this city has become to the railroad world has just recently been most strikingly demonstrated by the maneuvers of the Rock Island. This Chicago line, which has become so strongly entrenched in the Southwest, found the trend of trade from that section so determinedly setting toward St. Louis, as events show, that it was deemed necessary to have a line into this city. The St. Louis, Kansas City & Colorado road, which was owned and was rapidly being constructed by two enterprising St. Louis men, was bought by the Rock Island outright, and a rather dramatic struggle between that road and St. Louis Terminal Association interests ensued over the attempt to buy a controlling interest in the Wiggins Ferry Co., possession of which by the Rock Island would have made possible the creation of new terminals by lines not represented in the Terminal Association, the ownership of which is in the hands of the Big Four, Louisville & Nashville, Missouri Pacific, Wabash, Baltimore & Ohio Southwestern, St. Louis, Iron Mountain & Southern, and the Vandalia. While that fight is still unsettled, it seems likely that a compromise will be effected by which the Rock Island will get into St. Louis on favorable terms if it relinquishes its claim to a majority of the Wiggins Ferry Co.'s stock. The strong determination of the Rock Island to get into this city, based on the importance it evidently attaches to being here, is the significant fact in this struggle. The road has bought a large tract of land in West St. Louis, and will soon form one more in the list of St. Louis railroads.

The extensions of the Rock Island in the Southwest made it imperative that the road get into St. Louis, the permanent headquarters and trading center for that entire region. Its advent will still further strengthen St. Louis in that rapidly-growing section, the development of which means as much to St. Louis as did the development of the Northwest to Chicago. St. Louis will now derive a greater benefit from the several important extensions of the Rock Island in the Southwest. The Choctaw, Oklahoma & Gulf, recently acquired by the Rock Island, and in operation from Memphis to Amarillo, Texas, passing through a very rich and only partially-developed country, is to be extended further south and west, and feeders will be thrown out as conditions warrant. The

Rock Island has taken the first steps in an important extension of its Texas line from Fort Worth via Dallas, Corsicana and Houston to Galveston, 295 miles. It is claimed that this will be the shortest line between St. Louis and the Gulf via the St. Louis, Kansas City & Colorado, and that the Colorado road will also give a route from St. Louis to El Paso 100 miles shorter than any existing line. With what it has acquired and what it is definitely proposed to build, the Rock Island's new mileage in the Southwest will foot up something like 800 miles. The present policy of the road is marked by great aggressiveness, and as the road runs through the heart of the richest part of the Southwest, it is destined to play an important part in the upbuilding of that section and in contributing to the growth and advance of St. Louis.

### The Frisco's Enterprise.

It is a most fortunate circumstance for St. Louis that the St. Louis & San Francisco Railroad, or Frisco System, as it is now named, is vitally interested in the development of the Southwest. With St. Louis as its chief terminus, thus intimately identifying its own interests with those of St. Louis, this young but remarkably vigorous and progressive system is impelled by conditions and inclination alike to devote itself most energetically toward the rapid and complete development of the great Southwest. It has no diffusion of interests to be subserved; the Southwest is the only present direction in which it can advantageously expand and grow, and being both able and willing to undertake this work, it is doing it in large measure and in a manner which will most certainly conduce to the greater prosperity of the city, the road and the section.

Within two years the Frisco has bought several new lines, including the Memphis system of 1280 miles, running from Kansas City to Birmingham, and it has built and is now building other lines and connections, all of which aggregate 2908 miles. At the present time it is operating 3375 miles, and within another year the total mileage in operation will be 4686 miles. These figures take no cognizance of rumored extensions to remote Texas points and beyond. All who have studied the situation, and who know that progress is a law with railroads as with all things else, conceive that the manifest destiny of the Frisco is to push southeast from Birmingham to the seaboard; from some Texas terminus to the Gulf, and from a Western point to the Pacific; but the announcements of plans and surveys now being made to that end are invariably pronounced baseless by the officials of the road. What has been done, however, and what is being done in the way of extension work, and particularly in the wonderfully rich Oklahoma country, forms a chapter of activity both interesting and important. Two years ago the Frisco went no further south than Sapulpa, I. T. Now it is down as far as Brownwood, Texas, and a 50-mile extension to Brady, in the direction of San Antonio, is under construction. The Blackwell, Enid & Southwestern, an Oklahoma line financed by St. Louis capital, and partly constructed between Blackwell and Vernon, Texas, a distance of 250 miles, was recently bought by the Frisco, and construction work is being rapidly completed. This road penetrates the Kiowa reservation, the wonderful story of the settlement of which in a day filled the newspapers of a

year ago. The Oklahoma City & Western, partly built and being finished between Oklahoma City and Quanah, Texas, 180 miles, also passing through the heart of the Kiowa lands, is another recent acquisition of the Frisco. A rumor not yet denied by the Frisco management is that control has been obtained by that road of the Arkansas & Choctaw, which is surveyed to run from Texarkana along the north side of the Red river, through the Choctaw and Chickasaw nations, and thence across the Red river to Wichita Falls, Texas, a distance of 315 miles. This is another enterprise financed by St. Louis capital. Work is progressing everywhere along the line, and its early completion is assured. The Frisco will thus tap the Fort Worth & Denver road at three points not very far apart. How long it will stay at any of the three without extending remains to be seen.

These new lines, in connection with the road heretofore in operation in the Indian Territory and Oklahoma, will give the Frisco access to the most important cities and the richest sections of this great region. It will be in position to profit by the present development and the still greater to come, and wherever it goes will carry the possibilities of vastly-increased trade for St. Louis institutions. It will bear repeating and reiterating that Oklahoma, great as has been the development of the past ten years, is merely in its infancy. There are no comparisons applicable. It is in a class by itself, and no one can possibly set the limits on the wealth and development which the future contains for this young giant of the Southwest. No railroad is more alive to these facts than the Frisco, and none is in better position to make the most of this knowledge.

Besides these important new lines, the Frisco has bought, jointly with the Santa Fe, the Kansas Southwestern, a 60-mile road running between Arkansas City and Anthony, Kan. The Arkansas Valley & Western, a road surveyed from Sapulpa, I. T., to Enid, Okla., 125 miles, is likely to be built by an independent company, and if so, the Frisco would most naturally be the road to operate it.

Over in Arkansas the St. Louis & North Arkansas road, operating between Seligman and Harrison, is being pushed on to Leslie, 131 miles from Seligman. While not owned by the Frisco, St. Louis parties being the builders and operators, yet it is a feeder of the Frisco, and a tributary to St. Louis. It penetrates a country rich in mineral wealth and other valuable resources, and will be a factor in the development of Arkansas.

Coming nearer to St. Louis, an important enterprise in which the Frisco is interested is the line known as the St. Louis, Memphis & Southeastern. It is really an intermediary line, to be operated as part of the Frisco system. Starting from the main line of the Frisco at Spring Park, twelve miles west of St. Louis, it practically follows the Mississippi river to Luxora, Ark., fifty-five miles north of Memphis. Here a junction is made with the northern terminus of the Luxora branch, an existing Frisco line. This road is being laid with 75-pound rails, rock-ballasted, and will be provided with splendid new equipment. It will have 70-foot passenger coaches, electrically lighted. The line will be in operation between St. Louis and Memphis, 312 miles, by the 1st of next April. It will be a high-grade road physically, and having a grade of only eleven feet to the mile, will prove a wonderful tonnage line of great advantage to the trade of St. Louis in the South and Southeast.

In St. Louis the Frisco has recently bought thirty-five acres of ground in the

West End to provide facilities for its rapidly-increasing business. This gives the road fifty-two acres for terminals in that section, and will enable it to build ten miles of additional terminal yard track, giving it sixteen miles in all in the West End. With the Missouri Pacific and the Interstate Car Transfer Co., the Frisco is jointly interested in the St. Louis Belt & Terminal Railway Co., capitalized at \$3,000,000, and intended to relieve the congestion of traffic over the present lines of road. It will be an outer belt railroad, circling the city outside the boundary limits, and it is probable that all through freight over every St. Louis line will go over this road without coming through the city. It is also thought likely that along this belt road numerous factories requiring much ground and ample switch facilities will ultimately locate, both from St. Louis and outside cities. Work on the new belt road has begun, and it will be in operation early next year.

Improvement of equipment and physical condition is going on with the Frisco in a very extensive way. Within the year there has been contracted for and partially delivered \$5,000,000 worth of new equipment. Three hundred and forty miles of new 75-pound steel rails are being laid, and this season 400 additional miles will be rock-ballasted. The main line of the road, between St. Louis and Monett and between Kansas City and Memphis, is now equipped with 75-pound steel rails, the present standard of the road, and other parts of the line will be brought up to the standard as rapidly as possible.

Important as are the features of road extension and high standard of equipment, the efforts of the Frisco for the development of the country go much further. It is the announced purpose of the management to do everything a railroad can to develop every interest possible along the line of the road. Immigrants will be induced to locate, industries sought and enterprises promoted. An industrial commissioner has just been appointed, taking hold June 1, whose concentrated efforts will be devoted to securing such industries as are practicable in the various sections through which the road runs. The literature of the Frisco is already conspicuous for its excellence, its novelty and its interest. In the future literature will be even a greater feature of the efforts to popularize the country and people and develop it. Lectures, which have been successfully used by other roads to some extent in familiarizing the public with the attractions of another section, will probably be employed on a large scale by the Frisco management.

While not neglecting any of the work the most advanced and enterprising management elsewhere is carrying on, the Frisco people will undertake other and newer plans as well. For instance, a special effort will be made to develop the chicken, egg and dairy industries everywhere along the line that they are feasible. Cold-storage enterprises will be encouraged, to be established in a small way at many points. Statistics show what an enormous industry poultry is in the aggregate, and it is pointed out that in hardly any possible direction would as much wealth follow the same amount of investment and effort on the part of the farmer as in the poultry and dairy business as side lines. So, while working for big manufacturing enterprises and immigration and development on the broadest lines, so universal will be the efforts of the Frisco management that it will not overlook the fostering care, the providing of market facilities and the incentive to effort in the minor matters that go toward swelling the aggregate of prosperity. Everything

that can be done will be done to make the Frisco territory blossom as the rose.

#### The Goulds' Activity.

The great activity of the Gould interests naturally extends to St. Louis and its territory in the Southwest. While that energetic force in the present railroad world is busy with Eastern and Western schemes for perfecting an ocean to ocean system, the Southwest is receiving a large degree of attention as well. The Iron Mountain, the International & Great Northern, the Texas & Pacific, as well as the Cotton Belt, the Gould roads in the Southwest, and the Wabash and Missouri Pacific in Missouri, contribute in large measure to the trade of St. Louis and to the development of the territory tributary. One evidence of the growth of that business is the recent purchase by the Gould interests of 114 acres in South St. Louis for additional terminal facilities, made necessary by the enormous volume of freight traffic handled by the Gould lines.

About every conceivable interest is represented in the business handled by these lines. Lead, zinc, coal, lumber, cotton, cattle, early vegetables, fruit, grain, oil, manufactured products—these from sections where they greatly flourish and abound—indicate the vast variety of resources and the extent of territory which are tributary to the Gould lines in the Southwest. The proven zinc territory in Southwest Missouri, from which \$10,000,000 worth of ore has been taken in a single year, is likely to be extended into Indian Territory after thorough prospecting, and already the zinc of Arkansas is so attractive that a Gould road is being pushed up from Batesville, Ark., to connect with other lines in the Joplin section. The timber industry keeps some branch lines in Missouri, Arkansas and Texas busy, and new roads are being built and others extended to care for this traffic. On the Cotton Belt 55 per cent. of the traffic last year was in lumber and timber products, much of which came north to St. Louis and elsewhere, but large portions of which went into the newly-settled Oklahoma country, particularly the Kiowa reservation lands, where they were used to make settlers' homes.

By the purchase of the New Orleans & Northwestern and the construction of a link to the Texas & Pacific and an extension between Helena and Arkansas City, there will be a Gould line down the river between St. Louis and New Orleans, a road of such easy grades and tapping such important territory as to destine it to be a great traffic carrier and a valuable connection for both in and outbound St. Louis business.

The Houston, Beaumont & New Orleans Railway was recently chartered in Texas to build from the International & Great Northern at Houston to Beaumont, and it was stated that the line would be extended to New Orleans, but no announcement has yet been made of its being chartered in Louisiana. Announcement has been made, however, of numerous new branches and extensions to be built by the International & Great Northern aggregating several hundred miles of road, and which will shorten distances and afford better connections between several important Texas points.

A new road which is currently expected to be absorbed by the Gould interests is the St. Louis Valley Railway, practically completed between East St. Louis and a point opposite Cape Girardeau. It has been supposed by some that the Cotton Belt would fall heir to this new road, which, going to the New Thebes bridge, would afford the Cotton Belt a much desired line of its own into St. Louis. At the present time it is not decided that this shall be so. In the work of drawing set-

tlers to the South the Cotton Belt officers feel that they would be greatly facilitated by having a line into this central point. Nevertheless, some considerable progress is being made in this direction, the Stuttgart settlement, in the small prairie section of Arkansas, and the extensive fruit and truck development on the Lufkin branch, in Eastern Texas, being conspicuous instances of excellent work accomplished along that line. The acreage of fruit-raising is very rapidly growing, it being this year three times that of last year. Agricultural interests are also flourishing, the cotton acreage along the line of the road being this year from 10 to 20 per cent. greater than last year, and wheat now harvested is reported to be yielding very well on an increased acreage.

How great activity there is in the lumber industry is indicated by the fact that from Delta south along the line of the Cotton Belt sixty additional saw-mills have been erected in the past twelve to sixteen months. With the clearing of the forests the best of fruit and truck lands are made available. Peaches as fine as those of Georgia, tomatoes, strawberries—these are some of the products on which enterprising settlers are growing independent. Instances are given where one ear of strawberries gave a return to the growers of from \$1300 to \$1600 on the track.

Industrial development is progressing. There are cotton mills at various places; charcoal ovens around Shreveport; the lime industry is being extensively developed about McGregor, the product of which is largely used in Texas, and there are brick and tile works in numerous places. At the State penitentiary at Rusk there are iron works which turn out a heavy cast-iron pipe, marketed in Texas. There are vast deposits of iron ore around Lush and New Birmingham not utilized yet because of lack of available fuel.

#### Betterment of Railways.

The betterment of roadway and equipment is a notable feature of the railway situation in the Southwest. As an example, the Cotton Belt has spent for betterments alone in the past ten months \$850,000, and contracts out for work that should be done within the next ten months call for the expenditure of \$1,200,000 more. Thirty thousand tons of 75-pound steel rail have just been purchased. When laid it will complete a solid line of 75-pound rail between Mt. Pleasant, Texas, and Gray's Point, on the Mississippi river opposite Thebes, 600 miles long. This whole line is also being ballasted with from ten to fourteen inches of gravel; 75-pound rails will next be laid on the line between Mt. Pleasant and Fort Worth. From Texarkana north steam shovels, the big 65-ton ones, able to load from 2500 to 2800 tons of material in ten hours, are at work on the grade, so that by August 1 the ruling grade will be six-tenths. Within two years the cutting of grades, ballasting, etc., will cover the entire system in Texas as well as elsewhere. The road has purchased in the past year 1750 freight cars of 60,000 pounds capacity, and has under contract for speedy delivery 2135 of the same kind. It has under contract thirty-three modern locomotives, switcher, passenger and freight, and has purchased forty-seven others in the past three years. Fourteen additional passenger coaches have been bought in the last eighteen months, and a modern parlor car seventy feet long is under contract. Other new equipment includes four new steam shovels, complete, with steam unloaders, and a modern steam wrecking crane of 104 tons, to be delivered July 1. This will give some idea of how the Southwestern roads are being brought up to a high standard of physical condition, as what is

true of the Cotton Belt may also be said, in varying degree, of other important roads in the section.

There has been a good deal of talk of Southwestern extension of the Cotton Belt, one report contemplating a line from Hillsboro to Gatesville and another from Lufkin east to the Sabine river. Neither of these lines is a certainty. A small line is just about completed, however, from Renner to Dallas, by which the road gets into Dallas over its own tracks for the first time.

Several extensions are under way in the Southwest by the Missouri, Kansas & Texas, which runs from St. Louis to Galveston, with several branch lines in all three States. A line is being built from Stevens, I. T., just south of Coffeyville, Kan., to Guthrie and Oklahoma City. Other proposed lines are from Wybark, on the north bank of the Arkansas river, up the river for some distance, and then across to Guthrie, and another line talked about is between Coalgate, I. T., and Oklahoma City; 250 miles of road are under construction in this important territory, further enlarging St. Louis' trading opportunities and facilities in the Southwest. These extensions will give a particularly fine grade into St. Louis. There is talk of an extension of the road from Guthrie to Quanah, Texas, but that is not yet determined. The Missouri, Kansas & Texas is one of the pioneer roads of the West, and is accustomed to seeking out and penetrating good territory. Within the past two years it has very materially strengthened itself by the construction of short branch lines and extensions. One of these extensions is from Jefferson to Shreveport, the very thrifty Louisiana city. A 48-mile road was sufficient to add this important connection. The line from San Marcos to San Antonio, forty-seven miles, was another extension of advantage much out of proportion to the length of the line. A line from Denison to Bonham has just been opened up for business, and up in the zinc and natural-gas region of Kansas-Missouri two small lines have been added which will prove of great advantage. A line from Mineral City to Joplin has just been completed, and a road from Piqua to Marion, twenty miles, puts the road into the heart of the Iola gas fields. Zinc and lead ores are now hauled from the Joplin district over to the smelters which have been established in the natural-gas belt, and much of the product is then shipped to Galveston for export. There has been a wonderful industrial development in the Iola district within the last few years on account of the natural gas there, and Iola cement and brick have become famous.

#### The Santa Fe.

Though not a St. Louis line, it may be noted that the Santa Fe road has some extensions under way in the Southwest which will open up a new and fertile country not now provided with railroad facilities, and in this will benefit St. Louis in an indirect way. One line is from Newkirk, Okla., to Paul's Valley, I. T., a distance of 183 miles, where a connection is made with the Gulf, Colorado & Santa Fe. The Eastern Oklahoma, from Guthrie to Pawnee, has been extended to a connection with this line. Another new Santa Fe line runs from Paul's Valley to Erin Springs, twenty-five miles distant, and rumors current are to the effect that it may be extended from Erin to Lawton, and thence southwest into Texas, where a connection will be made with the main line somewhere toward El Paso. It is also reported that the Santa Fe has purchased the right of way of the Denison & Northern, which is graded from Denison almost to Dougherty, I. T., and will complete it. A branch from Mill Creek to

Coalgate is also talked of. It would give the road access to the important coal fields of Indian Territory.

The expenditures authorized by the Santa Fe for betterments this year are larger than ever before. It is noticeable that these expenditures are all in the way of increasing the earning power of its lines.

Other work to be done is the laying of 135 miles of new 75-pound steel rails on the Texas line. Thirty-one steel bridges on the same line are to be replaced by larger and stronger types to provide for the heavier locomotives and long trains.

A large section of the Texas lines are to be equipped for burning fuel oil from the Beaumont fields. This involves the erection of a number of immense steel storage tanks, and the installation of minor supply plants from which the locomotives will take the oil. Of the recent purchase of locomotives, fifty-three are to be assigned for service on Texas lines.

Of new lines not now getting into St. Louis, but which will play a more or less important part in the development of territory which must largely look to St. Louis for its supplies, even if it does not receive them over direct lines, the Ozark & Cherokee Central is deserving of attention. This road has just been opened to traffic between Fayetteville, Ark., its initial point, and Westville, I. T. According to original intentions, the road is to be run to Shawnee, Okla., a distance of about 200 miles. The road will open up a fine country not now penetrated by railroads, and as the management has already started in to advertise the advantages and attractions of the territory, it will doubtless do a good part in the development of the section.

The Fort Smith & Western is a substantial proposition in road building, the line being under way from Fort Smith, Ark., to Guthrie and Enid, Okla., a distance of 300 miles. It gives another east and west line through the Indian Territory and eastern part of Oklahoma, and is likely to be extended further west.

Besides these, there are numerous railroad projects which may or may not materialize. The Denver, Kansas & Atlantic Railway Co. has been chartered in Oklahoma, with \$15,000,000 capital, to build 1426 miles of road from Denver to Marshall, Okla., and from there in several directions—one branch to Paris, Texas; one to Fort Smith, Ark., and one from Marshall to the Red river.

Some of the others are not so ambitious in their scope, being content to propose connecting links. With all that is being done and that is proposed, however, it is well not to grow dubious. Take a look at the map of Iowa, for instance, and see how that State is criss-crossed with railroads, and then recall that when the Indian Territory is added to Oklahoma, as it will be one day, there will be a bigger and better State in the Southwest than Iowa. It will be the equal of any State in the Union in soil, climate, variety of resources and proximity to great markets. It will be the heir to all the ages of progress, the very incarnation of twentieth-century civilization. ALBERT PHENIX.

#### The Cotton Movement.

In his report for May 30 Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that the amount of cotton brought into sight during 272 days of the present season was 9,845,708 bales, an increase over the same period last year of 177,734 bales; the exports were 6,201,894 bales, an increase of 312,162 bales; takings by Northern spinners 1,983,098 bales, an increase of 174,763 bales; by Southern spinners 1,423,579 bales, an increase of 179,496 bales.



## SOUTHERN EDUCATIONAL THERAPEUTICS.

### A Peculiar Healing Art as Revealed in Words of Would-Be Physicians.

By EDWARD INGLE.

[Written for the Manufacturers' Record.]

"The wise physician has nothing to do with the reckless exposure that precipitated or created disease. His purpose is to cure the patient."

This figure of the healing art applied to the idea of Southern education was presented at the birth of the Southern Education scheme. It seems akin to the statement made at the same time and by the same accoucher regarding the attitude of the New Yorker toward the common schools of the South: "Let his best intelligence take account of the facts as they are, not concerning himself with antecedent causes. Thus bringing to the question practical sympathy, free from depreciatory criticism, he will command the respect that will make kindly sentiment a broad highway upon which he may advance in useful service to the people he would and should serve."

These are words of Dr. Robert C. Ogden, chief of the staff of physicians who would practice upon the South. While recognizing the apparent good intent and the kindness of purpose, and with no desire to indulge in depreciatory criticism, the wise patient, having come to years of discretion, must naturally make a few inquiries something like these:

Am I in need of any special treatment, or must I submit to it because someone wishes to practice on me?

Is he a wise physician who is not concerned with the "antecedent causes" of a disease he would cure?

Granted, for the moment, for the sake of the argument, that these questions are answered affirmatively, the patient, still wise and still a bit cautious, will naturally ask for the credentials of the new-comer and discoverer. Dr. Ogden immediately presents this diploma:

"While we were originally interested in the South through negro education, our impulses have risen from negro education to the question of the entire burden of educational responsibility that you have throughout this whole section of country."

Rather dubiously the prospective patient will reply: "You seem, therefore, to have practiced principally among negroes. What success have you had? And do you think that that sort of practice has fitted you to treat me?"

"Tut, tut," says the doctor playfully. "I suppose you must be alluding to 'the unsavory record of reconstructing with the suspicion and doubt of post-bellum alienation.' Practical business judgment decides powerfully and positively against the resurrection of the settled issues of a dead past. These require no discussion. Let me continue to read you our diploma: 'That the North has much assistance to render to the South in matters of public education will, perhaps, be frankly admitted by intelligent people from both sections. How this assistance is to be rendered is a practical question, at once delicate and difficult of solution. It is a matter of sentiment. Northern helpfulness will disappear if it is tendered from a wrong angle or based upon wrong premises. The feeling of the Southern people must be kindly and receptive if Northern educational experience is to have helpful value.'"

This feeling of receptivity and of kindness on the part of the patient will, with what Dr. Ogden calls the suppression of inconsequential personal opinion, be vastly intensified, of course, by his state-

ment regarding the attitude of the business men of the South toward the question of popular education, that "as a class they have much to learn, and most especially should they realize that to them is confided more than to any other class the responsibility for the solution of the grave and economic questions peculiar to their section and the other general questions that concern the welfare of the entire country," and by his equally happy and fortunate suggestion that if the business men be made to understand the question a force will be evoked "that shall make the Southland the rival of the North and West in the generous emulation of intelligence, good citizenship and the noblest Americanism."

These are some of the nicest things the doctor could imagine in his effort to be frank and to establish cordial relations between himself and the patient necessary to work out his experiment. In spite of their obvious blunderings, it would be a shame for the patient to raise a single question. In fact, a patient has no right to question his physician. If the physician prescribed does not suit him he can dismiss the physician. But the South is the veriest kind of a patient, though not so much so as not to ask a few questions.

The first that suggest themselves are: Are you gentlemen of the new school agreed among yourselves about this problem? Is it frankly admitted by intelligent people that the North has much assistance to render the South in matters of public education? Has accomplishment in the North justified methods? What have members of your staff to say about this? You have two field agents—Dr. G. S. Dickerman of New Haven, Conn., and Dr. Booker T. Washington of Tuskegee, Ala. The latter is denying in the methods employed at his institution the value of Northern educational policy followed for a generation in dealing with the class among whom you have heretofore practiced. Tuskegee is a confession of the sad plight to which you have brought your black patients. As to your white ones, Dr. Dickerman, viewing results of Northern educational endeavor stretching back nearly seventy-five years, upon its most fertile soil, says: "Now it is a serious question in the North how to provide good schools for the country. Even in Massachusetts there are scores of little places where educational opportunities are by no means of a high order. Else, why has Berkshire county 415 native white illiterate men of over twenty-one years of age? One county in northern Maine has over 23 per cent. of its native white voters who cannot read and write. New England has not yet answered in her own domain the question of education for her rural people."

So Dr. John Graham Brooks of Cambridge, Mass., dwelling particularly upon education in reformatories upon the Brockway plan to overcome the failures of education outside that should render reformatories unnecessary, says:

"Look for a moment at a State so small as Massachusetts, that has to pay almost \$5,000,000 a year for police protection, not counting a cent of the enormous indirect losses that show themselves later in degeneracy and pauperism. The town police and constables are not here reckoned in. Thirty-two cities (mostly small ones) paid in 1898 nearly \$5,000,000.

Think of a population so inconsiderable that gives us an annual list of arrests amounting to almost 100,000. Our State and county prisons alone cost us a million a year. The reformatories and prison buildings have cost nearly \$10,000,000. But I have heard the ablest specialists in the State dispute hotly whether we were gaining one inch of ground against this tide of lawlessness."

In view of these facts, which are typical of conditions in a much wider territory than that in which modern education was born and where it has been subjected to hot-bed cultivation, the patient may well ask: Are these illustrations of the intelligence, good citizenship and noblest Americanism which we may hope to emulate at some distant day? In fact, are you all satisfied with the methods which have been pursued? Hear again the doctors. Dr. Francis G. Peabody of Harvard University says:

"There is a great deal of memorizing and philosophizing in education which just prevents one from getting the reality of education and which leaves the student helpless before the problems of the modern world."

That is no news to the South. It is a fact long since discovered and well set forth by Dr. Charles W. Dabney, who says:

"We must make money before we can even have schools, and the very first thing is to train our people to produce. The book education we give them leads too many away from the industries in which they must make their living into professions already crowded."

Dwelling still upon many Northern educational ideas, Dr. Peabody continues:

"They have set before us the thought of personal self-culture as though one could find an end of living in his own self-satisfaction, when in reality a person is simply a tool to do something with, and the highest education one can have is when that tool is set to its most effective use in the service of the modern world."

Following closely upon this idea is Dr. James E. Russell of Columbia University, New York city, who says:

"Everyone ought to know that the training of the intellect alone is just as valuable to the ambitious criminal as to the efficient citizen. 'Knowledge is power' is a text transferred from millions of copy-books into the heads of millions of pupils, but few realize that power can be applied in ways harmful as well as helpful. The social problem, then, is how to make the most of the individual consistent with the well-being of society. The doctrine that all men are created equal and that it is the chief business of the State to keep them so must be superseded by the more rational theory that inasmuch as men are not equal, the State should make the most of their inequality. Some must be hewers of wood and drawers of water; others will become leaders despite all hindrances."

The state of ignorance about patent facts pictured in these words ought not to exist in a part of the country ambitious to render assistance to the South in education. But the last sentence is quite valuable.

Old-fashioned folks believe that much of the self-assumed worry of this new medical school originating in negro education could be avoided if the physicians should only ponder upon the original record of the setting apart of a distinct class of beings to be hewers of wood and drawers of water. Perhaps they have forgotten. Judging from results, modern educators seem to forget many good old things, the memory of which, however, is preserved by the "humbler clergy," who, according to one of the advance

agents of the new school of Southern Education, must "get out of the way of the steam road-roller or be lost under its pressure." For the benefit of the physicians the record may be here recalled. It is found in the words of Noah, awakened from his drunken sleep, before which he had known no distinction between Ham and the others. And he said:

"Cursed be Canaan. A servant of servants shall he be unto his brethren. Blessed be the Lord God of Shem; and Canaan shall be his servant. God shall enlarge Japheth, and he shall dwell in the tents of Shem; and Canaan shall be his servant."

Noah was pretty old when he said that—much older than many of the doctors who by words and acts are attempting to run counter to the law then laid down, and which has been exemplified through forty centuries of human history. But that was long ago—long before "education" had been invented, and long before the birth of Drs. Walter H. Page, Clark Howell or even Robert C. Ogden, who seem to imagine, perhaps unconsciously, that the gold cure will be a panacea. There is danger, however, in the gold cure applied to one disease. It frequently presents a man with his house swept and garnished who subsequently takes unto himself seven devils worse than himself. The last state of that man is worse than the first. May the danger not be general, especially in the case of education? Dr. Dickerman perhaps had that in view when he said:

"People will not prize anything that costs nothing. So long as all the school money comes from the State and the people do nothing but spend it, they will spend it unprofitably. And if, in the course of events, the national government should make educational provision and do nothing to cultivate the spirit of self-help and independent initiative, we could hardly expect anything better to come from that. The community must have a hand in the development of an institution so wrought out of its own character as a school."

Very true, though not quite strong enough. The community must have the sole hand in the development of an institution so wrought out of its own character as a school. Acceptance of that truth, however, would nullify the purposes of the Southern Education Board. It is a truth, though, emphasized by Dr. Charles W. Dabney in the sentence quoted above, for there is the widest kind of a difference between a people's making money to have schools and accepting money half enough or whole enough to have schools. Halving a wrong does not mitigate it. But Dr. Dickerman is no discoverer. Just about a year before his words were uttered the far-famed Capon Springs conference, which produced ultimately the Southern Education Board, resolved, upon motion of Dr. Herbert Welsh of Philadelphia, regarding the educational needs of the South, that "we therefore earnestly call on our fellow-citizens of both sections of the country to furnish such assistance to those States of the Union on which the burden chiefly rests as will enable them more fully to meet the needs and to relieve the strain of the situation."

One of the members of that conference was Hon. William L. Wilson. He was not present when the resolution was passed, but the next morning he expressed his dissent from it as a member of the committee on resolutions. It was reconsidered, and the whole matter was referred to the executive committee. Reports of the conference failed to reveal the final fate of the resolution, which was, indeed, but a shadow of the project

which occupied for many years in public life the energies of Henry W. Blair of New Hampshire—a project fraught with more danger to the South than even that of the Southern Education Board.

However, the patient, who, as is so often the case, has been almost lost sight of amid the disputations of the doctors, may be imagined as still raising his questioning voice. He may be satisfied with the diploma of the chief of staff of physicians as far as he has heard it, but he comes upon another part of the diploma referring to the defeat of the South in which Dr. Ogden says:

"The only conditions that Justice could demand of the defeated was an acceptance of the decision rendered by the sword the Court of last resort. Just at this point came a great source of irritation. Public opinion at the North demanded that the people of the South should come back as repentant rebels, returning prodigals, confessing wrongdoing in sackcloth and ashes. This demand was wrong. I admit it as a most positive offender."

Dr. Ogden says that all that belongs to the past. But his allusion brings the patient back to the inquiry about the qualifications of the would-be physicians—an inquiry which finds answer in the statement that the wise physician must be thoroughly acquainted with the "antecedent causes" of the disease; for the educational complaints afflicting the South today are directly traceable to the mistakes of the physicians of twenty-five and thirty years ago, of which Dr. Ogden says he was one of the most pronounced.

The patient is doubtless sorry for him, but in view of his own confession and of his evident desire to disregard facts which cannot be disregarded, Dr. Ogden must be prepared to listen to something like this:

You intimate that you were grievously mistaken in your practice years ago. Is that a recommendation for you today? It was not necessary for you to acknowledge your mistake. Its record is written in clear and unmistakable characters. Your materia medica has been condensed most effectively by Dr. Thomas Dixon in "The Leopard's Spots," and has been published by a firm of which one of your staff, Dr. Walter H. Page, is a member. Read it. We have hardly been released from the body of that death to which your practice consigned us. We are very, very sorry that you feel so sorry, but you may hardly expect a fellow who has been brought low by an operation for appendicitis when he was suffering only from cramp colic, or a fellow who, through improper vaccination, has been inoculated with a loathsome disease, to have much faith in the old physician who is responsible for his ills, however holy that physician may regard his attempt at a compromising or eclectic practice.

That is not inhospitality, not sectionalism. It is common sense, even though the physicians be sponsored by prominent Southerners. Prominent Southerners before this have made mistakes, and their people have suffered accordingly.

Still, the South will not utterly disregard the would-be physicians. If they are really sincere in their desire to aid the South the way is easy for them. The South, already long-forgiving, will forget all the mistakes they have made if they will use whatever influence they may possess, if they possess any, in the suppression of their Lodges, Crumpackers, Depews and other demagogues who at irregular intervals attempt to cure local ailments by scattering the stimulant of the Southern disease.

In conclusion: But a few days ago Dr. Wallace Buttrick, in carrying out the

program of the physicians, told educators of Georgia that "in the South was the virgin life of the country, and that uncontaminated it offered the greatest return in educational harvest." There was great applause at the utterance of this truth. That applause should not cause men of the country to forget the words of wisdom:

"He that standeth steadfast in his heart, having no necessity, but hath power over his own will, and hath so decreed in his own heart that he will keep his virgin, doeth well."

In spite of the record of the past thirty years, in spite of the baleful results of practices of self-constituted physicians, the South still has the virgin life of the country. Let it not be contaminated. Let not its virgin be brought low in the dust. The country will need it some day—aye, now needs it.

### New Orleans Stretching Out.

[Special Cor. Manufacturers' Record.]  
New Orleans, La., June 2.

Perhaps there has not been in recent years a subject so fully discussed in the local newspapers and in the newspapers throughout the States of Louisiana and Texas in general, considering commercial enterprises that have been originated in New Orleans, as has been the excursion of the merchants of this city made under the auspices of the Progressive Union to Texas.

The object of the trip was to cultivate a closer relation with the merchants and business men in all lines throughout the territory visited.

There was scarcely a line of business in New Orleans that was not represented on the merchants' special train. At every town some one of the New Orleans merchants told of the advantages New Orleans offered for wholesale buying.

Manager Tom Richardson of the Union made use of some very fine argument on the tour. He did not hesitate to acknowledge that Texas was the greatest of all the States in resources, and then set forth that it would be worth \$100,000,000 to Texas if New Orleans had a population of 1,000,000 people, so that the products of the Lone Star State might the more extensively enter into the markets of the world.

Another argument used by the New Orleans merchants to great advantage was that really no genuine prosperity was ever yet enjoyed at the price of some one else's misfortune. It was shown on the trip that the development of Louisiana and Texas means common aggrandizement; that New Orleans was destined shortly to become one of the largest cities in the United States; that the people of both States are to enjoy a prosperity such as this country has never known; that the prosperity of one State is bound to help the people of the other; that the two States having so much in common, should therefore seek to create more.

The Gunn & Gunn Company of Orange, Liberty county, Florida, has been chartered, with a capital of \$25,000, to deal in logs, timber and lands and manufacture timber and other wood products. The incorporators are W. H. Gunn, W. A. Lewis and W. H. Gunn, Jr.

The floating steel dry-dock built by the Maryland Steel Co. at Sparrow's Point has been formally accepted by the national government. Already requests from merchant vessels for docking have been made.

The sales in the Joplin (Mo.) district during the week ended May 31 were 12,331,580 pounds of zinc ore and 1,684,590 pounds of lead ore, valued in all at \$208,161.

## RAILROADS.

[A complete record of all new railroad building in the South will be found in the Construction Department.]

### A LONG ELECTRIC ROAD.

New Orleans & Southwestern Awards Contracts for Construction.

Mr. C. R. Young, general manager of the New Orleans & Southwestern Railroad Co., writes from Thibodaux, La., to the Manufacturers' Record as follows:

"The New Orleans & Southwestern Railroad Co. will be ready next week to break ground for the building of the road. The contract for building the roadbed has been awarded to Bryan, Haynes & Turner of Memphis, Tenn. Most of the contracts for the machinery have been awarded. The road will be seventy-seven miles long, from Hahnville, on the Mississippi river, down to Montague, close to the Gulf. The gauge will be standard, four feet eight and one-half inches. The power-house, offices and shops will be situated in Thibodaux, which is the center of the system.

"The contract for the dynamos has been awarded to the Bullock Electric Manufacturing Co. of Cincinnati for three 1000-kilowatt, 15,000-volt, three-phase, 60-cycle, together with two 150-kilowatt exciters and five 600-kilowatt motor generators.

"The boilers have been awarded to the Heine Company of St. Louis, the condensers and feed pumps to the Worthington Company, the heaters to the Warren-Western of New Jersey, the switchboards and overhead work to the Safety Electric Co. of New Orleans. The road will be both passenger and freight.

"The locomotives will have four 160-horse-power 600-volt motors. The intermediate cars will have two 38-horse-power motors. Light and power will also be supplied along the whole line.

"The road will be completed about Christmas time. One large drawbridge will span the Bayou Lafourche, which will be operated electrically from the power-house."

### MAY MAKE A THROUGH LINE.

Link in a Possible New Route from Raleigh to Charleston.

Mr. John A. Mills, president and general manager of the Raleigh & Cape Fear Railway, writes to the Manufacturers' Record from Raleigh, N. C., that the company has located a line to Lillington, the seat of Harnett county. The Raleigh & Cape Fear now extends from Raleigh southward to Sippahaw, in the southern part of Wake county, a distance of twenty-one miles, and the proposed extension will be about fifteen miles long, also in a southerly direction.

Some time ago it was reported, as then published in the Manufacturers' Record, that the Carolina Northern Railroad, which extends from Lumberton, N. C., to Marion, S. C., would be joined with the Raleigh & Cape Fear road by the building of a connecting link from Lumberton via Fayetteville and Lillington. At the same time it was said that another extension would be built from Marion to Charleston, Philadelphia capitalists being interested in the entire plan. Mr. Augustus Mellier, president and general manager of the Carolina Northern, it may be noted, has his office in Philadelphia. The building of the proposed extension from Sippahaw to Lillington apparently indicates that the project described is to be fulfilled.

If a line between Raleigh and Charleston should be thus constructed it might be used, in connection with the Seaboard Air Line at Raleigh, for a new direct route from Washington, D. C., to Charleston, S. C. At present the Seaboard does not

enter Charleston, although the projected Chattanooga, Augusta & Charleston line would give it entrance there.

### BIRMINGHAM EXTENSION.

Seaboard Completes Financial Arrangements for Building the Line.

The financial arrangements necessary for the extension of the Seaboard Air Line Railway from Atlanta to Birmingham are made. A syndicate has been formed to underwrite an issue of \$5,300,000 of 4 per cent. bonds, which will be a first mortgage on the Birmingham extension and a direct lien on the Seaboard Air Line. The membership of the syndicate includes Ladenburg, Thibault & Co., Vermilye & Co., F. R. Pemberton and others of New York; the Baltimore Trust & Guarantee Co., J. Wm. Middendorf & Co. and others of Baltimore, besides John L. Williams & Sons of Richmond.

A report prepared by Vice-President Barr of the Seaboard regarding the prospect of the Birmingham extension expresses the opinion that the extension will, in addition to paying its fixed charges, yield to the Seaboard Air Line a net revenue of more than \$200,000 a year. The amount of new construction required to utilize the East & West Railroad in this extension will be between sixty-five and seventy miles. The East & West will, however, have to be improved in order to handle heavy traffic.

Attention is also being directed towards the building of the proposed Chattanooga, Charleston & Augusta Railroad, which is to branch off from the Seaboard at Athens, Ga., and go by way of Augusta to Charleston, S. C. These two pieces of proposed construction will, when completed, give the Seaboard a direct line from the Birmingham district to tide-water by way of Atlanta, Athens, Augusta and Charleston.

### New Enterprises in Alabama.

Concerning the projected railroad in Northern Alabama, described last week, Mr. W. J. Boykin, one of the incorporators, writes to the Manufacturers' Record as follows:

"We are now organizing the Alabama, Tennessee & Missouri Railway Co. The railroad will run from Gadsden in a north-westerly direction through the counties of Etowah, St. Clair, Blount, Cullman, Morgan, Lawrence and Colbert to a point on the Tennessee river near Florence, Ala. We have associated with us some capitalists of New York city, and we have good reason to believe that within a few months much will be done for the development of this district. The work of building the railroad will be vigorously prosecuted."

Mr. Boykin also says that the Alabama Steel & Iron Co.'s purchase of iron-ore lands amounts to about 5000 acres, and the Elliott-Chapman Coal & Coke Co.'s purchase of coal lands amounts to more than 23,000 acres. Mr. J. M. Elliott, Jr., is buying large quantities of timber land. The contract for the railroad has not yet been let.

### PADUCAH STREET RAILWAY.

Reorganization to Be Followed by Extensions and Improvements.

The Maltby-Hornaday Company, bankers and brokers, of Cincinnati, Ohio, writes to the Manufacturers' Record as follows:

"Articles of incorporation of the Paducah City Railway were filed at Paducah, Ky., May 24. The capital stock of the new company is \$300,000. Charles S. Maltby of the Maltby-Hornaday Company was the chief operator in the transaction, and the deal was consummated through the efforts of the Maltby-Hornaday Company.



"Paducah Street Railway has fifteen miles of track and a light and power plant. The reorganization contemplates betterments and extensions of the line. It also provides for a large bond issue to take care of extensions and betterments. The old directors of the Paducah Railway are to continue in their positions, and the new management does not contemplate radical changes."

#### Baltimore to Washington.

A contract has been awarded to Rogers & Walker for grading the line of the Washington, Annapolis & Baltimore Railway, thirty-one miles long, from Westport, in the suburbs of Baltimore, to Chesapeake Beach Junction, at the line of the District of Columbia. This road, as heretofore stated, is to be built by Ohio capital, and W. M. Lamprecht of Cleveland is president of the company. Mr. James Christy, Jr., of Akron, Ohio, is general manager, and for six months has had his office in Washington. The Berwyn & Laurel Electric Railway, ten miles long, is to be part of the line, extending, as it does, from Berwyn, near Washington, to Laurel, Md. The rail contract was awarded some time ago. A branch is to be constructed from a point near Odenton to Annapolis. Rogers & Walker have been working on the Baltimore & Ohio Railroad improvements at Sykesville, Md.

#### Tennessee Central's Progress.

The arrival at Nashville of the first train over the Tennessee Central Railroad was made the occasion of a demonstration, which included a parade participated in by Governor Benton McMillin, Mayor J. M. Head, Col. Jere Baxter and others. Local military companies, the fire department and other organizations were also in the line. After the parade there was a meeting in the Tabernacle, where addresses were made by the Governor, the Mayor, and Colonel Baxter, the latter thanking the people for their encouragement of the construction of the railroad. The contract for the Nashville to Clarksville part of the road has been awarded to W. J. Oliver & Co. of Langley, S. C. It amounts to nearly \$1,000,000. It is stated that the river route will be followed on account of the advantages to be derived from grading and alignment.

#### Will Extend to Birmingham.

Mr. W. A. Hawkins, president of the Columbus, Eufaula & Gulf Railroad Co., writes from Columbus, Ga., to the Manufacturers' Record as follows: "The proposed extension of my company's line to Birmingham, Ala., has been decided upon, and will probably go via Tuskegee and Rockford."

The main line of the Columbus, Eufaula & Gulf is to run south from Columbus, Ga., to Eufaula, Ala., and thence to St. Andrews Bay, Fla. The Birmingham extension as described would run west from Columbus, to Tuskegee, Ala., and thence northwest to Rockford and Birmingham, a total distance of 140 to 150 miles, and making a total length of line of more than 300 miles.

#### Double Track All the Way.

Advices from Jackson, Miss., state that the last contracts have been awarded for the completion of the Illinois Central's double track between Jackson and New Orleans. When this work is completed the Illinois Central will have a double-track line on a low grade from Chicago to New Orleans. The double track north of Cairo is reported as already practically complete. Among the grade reductions is that from Mounds to Fulton, which has

been cut down from fifty-two to thirty-seven feet per mile; between Yazoo City and McComb City has been cut down from thirty-seven feet to twenty feet.

#### A New Coal Road.

Mr. J. L. Caldwell, president of the line, writes from Huntington, W. Va., to the Manufacturers' Record as follows:

"The Guyandot Valley Railway will be extended from a point called Midkiff, on the Guyandotte river, about forty miles south of this city, at or near Logan Courthouse, Logan county.

"The country is a coal country. The construction contract has been let to Messrs. Carpenter, Wright & Co. of Richmond and Covington, Va., but their present address is in this city."

#### Wabash Into Pittsburg.

An agreement has been reached between the Wabash Railroad and the Pennsylvania Company by which the Wabash crosses the Pennsylvania lines to enter Pittsburg. This announcement has been confirmed by both companies, and it disposes of reports that the Gould system would be delayed in gaining an entrance to Pittsburg because of opposition aroused in the Pennsylvania Railroad Co. as a result of the Gould's purchase of the Western Maryland.

#### Railroad Notes.

Part of the Oklahoma & Western Railroad, an extension of the Frisco, has been completed from Oklahoma City to Chickasha, thirty-seven miles, and is to be operated as part of the Southwestern division.

Mr. E. A. Frost, general manager of the Texas & Louisiana Railroad Co., writes from Lufkin, Texas, to the Manufacturers' Record: "We will extend our line in the near future, but have not decided on route definitely as yet."

Mr. Stuyvesant Fish, president of the Illinois Central Railroad, writes the Manufacturers' Record: "We are considering the establishment of large shops at Memphis," thus confirming the report that such improvements are projected.

The Consolidated Railways, Light & Power Co. of Wilmington, N. C., has begun the work of converting the Wilmington Seacoast Railroad into an electric line between Wilmington and Wrightsville Beach. Mr. A. B. Skelding, the general manager, has charge of the work.

Mr. John M. Egan, president of the Central of Georgia Railway Co., writes to the Manufacturers' Record: "We have secured some additional land for terminals at Chattanooga, having purchased ten or eleven acres adjoining our present right of way near Roswell avenue."

The East Union Lumber Co. of Hyde, La., is considering a plan to extend the East Union & Greensburg Railroad into Greensburg. It is reported that the Illinois Central is behind the movement, and that the extension will be completed in time for handling the coming cotton crop.

It is reported from Chattanooga that the Birmingham Belt Railroad is having a line surveyed from Birmingham, Ala., to Atlanta. Before the Seaboard Air Line purchased the East & West Railroad of Alabama it was rumored that others were also seeking to obtain control of the line.

Mr. James U. Jackson, president of the North Augusta Electric & Improvement Co., writes from Augusta, Ga., to the Manufacturers' Record that the Augusta & Aiken Railroad is practically completed between the two cities. Tracklaying in Aiken, the terminus of the road, began recently.

The incorporation of the Lexington & Columbia Railway Co. at Columbia, S. C., is to build an electric railroad from Lexington to Columbia, about twelve miles. A bridge over the Congaree river will be necessary. The incorporators are Alfred J. Fox, Julian E. Kaufman and G. T. Graham, all of Lexington.

Mr. Morgan Jones, president of the Wichita Valley Railway, Wichita Falls, Texas, writes the Manufacturers' Record that the company is negotiating to extend the line, and if the cities of Wichita Falls, Haskell and Stamford comply with their part of the agreement in regard to rights of way and subsidy, the additional road will be built.

W. A. Park, who has one of the contracts for building the Knoxville, LaFollette & Jellico Railroad in Tennessee, has a section of two miles of rock work about halfway between LaFollette and Jellico. The right of way has been cleared and blasting begun. His contract includes the construction of 3000 cubic yards of culvert masonry.

Reports in circulation at Norfolk, Va., state that promoters are planning the construction of an electric railway from Norfolk to Petersburg to connect with the Richmond & Petersburg electric road. Gentlemen interested in the electric railways of Richmond are quoted as saying that they know nothing about the proposed construction.

Mr. Hunter McDonald, chief engineer of the Nashville, Chattanooga & St. Louis Railway, writes to the Manufacturers' Record as follows: "We are making a survey with a view to determining the practicability of building from Clarktown to the Green Place, a distance of about seven miles. The line is merely preliminary, and I am unable to say whether it will be built or not."

The incorporation of the Corsicana Transit Co. at Corsicana, Texas, is for the purpose of constructing an electric railway system there. The incorporators are A. Templeton, Stephen Smith, Aaron Ferguson of Corsicana, W. F. Little of St. Louis, F. N. Stormont, S. B. M. Long and R. W. Wortham of Paris, Texas. The company has the right to carry freight as well as passengers.

The incorporation of the Moberly & Missouri Railroad Co. is reported from Jefferson City, Mo., to build an electric railway from Huntsville to Moberly and Perry, in Randolph, Monroe and Ralls county. The incorporators are J. H. Starr of Centralia, W. M. Affick of Middle Grove, F. B. Miller of Carthage, F. C. Jacoby of Moberly, C. A. Thompson of Centralia, J. D. Houseman of St. Louis and S. D. Stolen of Burnside, Ill.

#### Alabama Pyrites.

Mr. O. A. Smith of Atlanta, president of the Alabama Pyrites Co., referring to a letter recently published in the Manufacturers' Record, says:

"Your article under date of May 22, 1902, entitled 'Pyrites in Alabama,' contains errors which I desire to correct as to matters therein referred to in which I am interested. Swift & Co. do not own nor are they interested, so far as I know, in any company owning pyrites in Clay county, Alabama. The Alabama Pyrites Co. owns 2000 acres of pyrites property, which contains practically the entire pyrites deposits in Clay county, Alabama. Swift & Co. have nothing to do with this company, either directly or indirectly. The Eastern Railroad Co. of Alabama has contracted with the Alabama & Mineral Railroad to build it a standard-gauge railway to the mines of the Alabama Pyrites Co., which is now being proceeded with."

## TEXTILES.

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the Manufacturers' Record. We shall be glad to have such matter at all times, and also to have any general discussion relating to cotton matters.

## TWO COTTON-MILL MERGERS.

The Plans Proposed by Mr. Fries and Mr. Underwood, Respectively.

[Special Cor. Manufacturers' Record.]  
Charlotte, N. C., June 3.

Two distinct efforts are being made to form combinations of the Southern cotton mills, one by Mr. T. L. Underwood of New York city, and one by Mr. Henry E. Fries of Winston-Salem. Both of these promoters have been at work for four months past on their respective scheme, and they have now reached the point when collapse or success must be very soon announced. Mr. Underwood's plan, as has been stated, is to combine 60 per cent. or more of the yarn mills of the South into a trust, which will be incorporated next fall under the laws of New Jersey as the Southern Cotton Yarn Co., with a capital of \$60,000,000. Mr. Fries' plan is along similar lines. He proposes to buy up the cotton mills, the number being limited by the desirability of the respective plants and the price at which they can be bought, and operate them under one management.

Mr. Underwood was here last Saturday on his return from a visit to Atlanta and other Southern points in the interest of his proposed merger, and Mr. Fries was here today. Mr. Underwood talks freely; Mr. Fries does not. In an interview with a correspondent of the Manufacturers' Record today Mr. Fries intimated that he was making satisfactory progress with his scheme, but that he preferred to make no statement at the present time for publication. He is plainly confident of success, but declines to show his hand until his deal is signed up and completed. It is known that he has selected a number of cotton mills in this State, as well as in South Carolina and Georgia, and has practically purchased them. He has picked out only such properties as he considered desirable, and it is believed that he has secured the desired number of plants. This, at least, is the opinion of well-posted mill men in Charlotte. The general opinion here is that the Fries combination is practically assured.

Mr. Underwood talks very hopefully of his scheme, and says that the owners of over 500,000 Southern spindles have already signed a contract to deliver their mills into the hands of the combination. He gives the following list of mills that have signed his agreement:

The Tolar, Hart & Holt Mills, Fayetteville; the Elizabeth City Cotton Mills, Elizabeth City; the York Cotton Mills, Yorkville, S. C.; the West Huntsville Cotton Mills, Huntsville, Ala.; Opelika Cotton Mills, Opelika, Ala.; Sycamore Cotton Mills, Sycamore, Ala.; Central Mills, Sylacauga, Ala.; Columbia Cotton Mills, Columbia, Ala.; the Quintette Cotton Mills, Edenton, Ga.; Chinnabee Mills, Talladega, Ala.; Union Springs Cotton Mills, Union Springs, Ala.; the Knoxville Cotton Mills, Knoxville, Tenn.; the Sutherland Manufacturing Co., Augusta, Ga.; the Cedartown Cotton Co., Cedartown, Ga.; Paulding Cotton Mills, Dallas, Ga.; the Georgia Manufacturing Co., Gainesville, Ga.; Pearl Cotton Mills, Elberton, Ga.; Hampton Cotton Mills,

Hampton, Ga.; Forsythe Manufacturing Co., Forsythe, Ga.; Atlantic and Gulf Mills, Quitman, Ga.; J. E. Smith Manufacturing Co., Thompson, Ga.; Eagle Cotton Mills, Madison, Ga.; Argonaut Manufacturing Co., Covington, Ga.; Sumter Cotton Mills, Sumter, Ga.; Elm Grove Cotton Mills, Lincoln; Newton Cotton Mills, Newton; Manetta Cotton Mills, Lando, S. C.; Rodman & Heath Cotton Mills, Waxhaw; Monroe Cotton Mills, Monroe; Smithfield Cotton Mills, Smithfield; the Holt-Williamson Manufacturing Co., Fayetteville; Levi Cotton Mills, Rutherfordton; Tuscarora Cotton Mills, Yorkville, S. C.; Belmont Cotton Mills, Shelby; Stanley Creek Cotton Mills, Stanley Creek; Wadesboro Cotton Mills, Wadesboro; Albion Cotton Co., Mount Holly; Tuckasegee Manufacturing Co., Mount Holly; Spencer Mountain Mills, Lowell; Nims Manufacturing Co., Mount Holly; Mount Holly Mills, Mount Holly; High Falls Manufacturing Co., High Falls.

Mr. Leonard Paulson of New York and Mr. R. S. Reinhardt of Lincoln, who are closely identified with Mr. Underwood, say that the combination is a settled fact. Mr. Underwood himself says: "It will mean the immediate investment in Southern mills of about \$8,000,000 in New York capital. The consolidation will effect a maintenance of a fixed price for the product of the mills, causing an improvement in the selling of the goods. It will result in a great saving in the distribution of the goods, which will go to their natural markets. It will also mean great saving in the purchase of supplies or stores. The plan is fair to all the mills, and they are coming to take that view of the matter. It is more conservative in its capitalization, so far as the preferred stock is concerned, than any other industrial company that has been floated on the New York market."

"There is no longer the shadow of a doubt about the success of the merger. Ten of the best-known mill men in the South are busily preparing for the organization, which will be effected inside of ninety days."

There has been some holding back on the part of Southern mill men, under the belief that the success of the Underwood merger would result in the elimination of many officials. It has been the idea that under the trust nearly all the officers of individual mills would lose their positions, all the mills being placed under one general management. On this point Mr. Underwood says that there will be no change of mill officials for a year. After that period dismissal will be made only for logical cause. Mr. Underwood further says that two-thirds of the directors of the trust will be Southern men, and he believes that the president will be a Southerner.

While Mr. Underwood says that his merger will be perfected in ninety days, Mr. Fries sets no date for the perfection of his plan. Mr. Underwood's faith is shared in by quite a number of people here, but the prediction is freely made that the Fries trust will be the first in the field.

#### Union Bleaching Plant.

James B. Duggan of Utica, N. Y., president of Union Bleaching & Finishing Co., has purchased site for plant near Fayetteville, N. C. Arrangements are now being made for the construction of building, main one to be of brick, 355 feet front, with eels 80x210 feet. Equipment will have capacity for bleaching ten tons daily, or about 100,000 yards of cloth. This company was reported incorporated in April, with capital of \$2,500,000, for erecting plants of this character in the

South. It will be recalled that B. N. Duke of Durham, N. C., is vice-president, and that among the directors are Messrs. Anthony N. Brady and Thomas F. Ryan of New York city.

#### For Another Mill.

The Carolina News of Chapin, S. C., is agitating for a revival of a movement to build a cotton mill there. The town has 400 population and a planing mill, a grist mill, a ginney and a wagon and buggy shop are doing a growing business, while nearby is a canning factory and a tobacco factory also doing well. The News argues that the success of these small industries should encourage larger enterprises, and states that land and building material are cheap, and that more than enough cotton is sold at Chapin than would be required to supply the mill.

#### Textile Notes.

It is rumored that a large cotton mill will be erected at Sheffield, Ala., and J. W. Worthington is mentioned in connection with the enterprise.

In its large No. 2 mill, recently fully reported, the D. E. Converse Company, Glendale, S. C., will manufacture 27-inch print cloths, not 24-inch cloths, as was at first stated.

J. S. Bowers, secretary of Scotland Neck (N. C.) Cotton Mills, has purchased the Enfield (N. C.) Knitting Mills. If the sale is confirmed the plant will be removed to Scotland Neck for operation.

Russell Manufacturing Co., Alexander City, Ala., will soon double the capacity of its knitting mill, which had only recently been completed. The increased capacity will reach 450 dozen fine shirts per day.

Hope Mills (N. C.) Manufacturing Co. has decided to add to its plant a finishing mill and a weave mill. Its present plant operates 12,582 spindles and 752 looms, producing madras, chevots and dress goods.

Washington Woolen Mills of Fredericksburg, Va., intends to make extensive improvements to its plant, including the installation of a new water-wheel, ten looms and other machinery, and the erection of an additional story to the present building.

Messrs. L. C. Mandeville, E. G. Kramer, W. J. Stewart, H. O. Lovvorn, Hamilton Hogan, C. M. Tanner and L. P. Mandeville of Carrollton, Ga., have incorporated Mandeville Mills, with capital stock of \$200,000, for the manufacture of cotton goods and other fabrics.

Weatherford (Texas) Cotton Mills has organized, with subscribed capital of \$50,000, to build cotton mill lately reported proposed. W. S. Fant is president; W. D. Carter, vice-president; L. M. Bailey, treasurer, and C. C. Littleton, secretary. Details are now under consideration.

Pilot Cotton Mills, Raleigh, N. C., will install considerable additional machinery, and has begun the erection of a new building to accommodate the new equipment. This latter will include 2000 spindles (which increases the full complement to 8000), a number of new looms and other apparatus.

Capitalists from Boston, Mass., and experienced cotton manufacturers from Columbia, S. C., contemplate erecting a \$200,000 cotton mill at Hartwell, Ga., and have made a proposition to local investors. It is asked that local investors subscribe a small percentage of the proposed capital.

Another cotton mill is announced for establishment at Anderson, S. C. Charter will be applied for at once, capital stock

to be \$200,000, and possibly \$300,000. D. P. McBrayer, president of Riverside Manufacturing Co., is promoting the new enterprise. His present company operates 10,000 spindles.

Monticello (Ark.) Cordage Mills, recently incorporated, has effected permanent organization. The directors are Messrs. Walter Lambert, C. T. Harris, W. A. Wood, W. N. Brown, C. T. Duke and E. D. Winter. Harry Haukins is secretary-treasurer, and W. L. Anderson is president. Arrangements will be made to establish a plant capitalized at \$20,000.

Messrs. Geo. W. Evans and W. A. Power of Anderson, S. C., have completed arrangements for the establishment of a \$20,000 mill for manufacturing yarns and half-hose. The Messrs. Evans and Power, in conjunction with R. E. Ligon, W. R. Osborne, E. F. Geiger, D. P. McBrayer, Calhoun Harris, J. W. Roberts and R. E. Burriss, will incorporate a company to complete the enterprise.

Broadus Cotton Mills of Stevenson, Ala., lately mentioned, has completed its plant and begun operations, producing about 2500 pounds of yarns per day of eleven hours, with about forty-five operatives employed. The company's plant includes main building 75x156 feet, engine-room 36x26 feet, boiler-room 30x30 feet, these costing about \$8500. The spinning spindles number 2500; capitalization is \$50,000.

Messrs. Frederick and MacIn Sloss of Birmingham, Ala., announce that they are authorized to offer a section (640 acres) of coal lands in the Birmingham district as an inducement to cotton mills to locate in that district on the line of the Louisville & Nashville Railroad. Milton H. Smith, Louisville, Ky., president of the railroad, authorized this announcement through the Messrs. Sloss. It is said the lands are worth \$50 an acre.

Hillsboro (Texas) Cotton Mill Co. held its annual meeting last week, and announced that the condition and progress of the mill is satisfactory. The president's report showed \$55,813 subscribed and \$41,658.99 paid in. It is believed that the balance will be readily forthcoming. The building has been paid for; most of the machinery is on hand. The production of duck and sheeting will be commenced by September 1; equipment will be 5000 spindles and 130 looms.

#### QUOTATIONS OF COTTON YARNS.

By Buckingham & Paulson, New York, Philadelphia and Chicago, June 3.

No. 16s-1 and 12s-1 warps.....	14	@14 1/4
No. 14s-1 warps.....	14 1/2	@14 1/2
No. 16s-1 warps.....	15	@15
No. 20s-1 warps.....	15 1/2	@15 1/2
No. 22s-1 warps.....	16	@16 1/2
No. 28s-1 warps.....	16 1/2	@16 1/2
No. 6s to 10s yarn.....	14	@14
No. 12s-1.....	14 1/2	@14 1/2
No. 14s-1.....	15	@15
No. 16s-1.....	15 1/2	@15 1/2
No. 20s-1.....	16 1/2	@16 1/2
No. 22s-1.....	17	@17
No. 28s-1.....	17 1/2	@17 1/2
No. 8s-2 ply soft yarn.....	14 1/2	@14 1/2
No. 10s-2 ply soft yarn.....	15	@15
No. 12s-2 ply hard.....	14 1/2	@14 1/2
No. 14s-2 ply.....	15	@15
No. 16s-2 ply.....	15 1/2	@15 1/2
No. 20s-2 ply.....	16 1/2	@16 1/2
No. 22s-2 ply.....	17	@17
No. 28s-2 ply.....	17 1/2	@17 1/2
No. 40s-2 ply yarn.....	22 1/2	@22 1/2
No. 8s-3, 4 and 5 ply.....	14	@14
No. 20s-2 ply chain warps.....	16 1/2	@16 1/2
No. 24s-2 ply chain warps.....	17 1/2	@17 1/2
No. 26s-2 ply chain warps.....	18	@18
No. 30s-2 ply chain warps.....	18 1/2	@18 1/2
No. 16s-3 ply hard twist.....	15 1/2	@15 1/2
No. 20s-3 ply hard twist.....	16 1/2	@16 1/2
No. 26s-3 ply hard twist.....	17 1/2	@17 1/2

Market weak and unsettled, with prices nominal.

#### Cottonseed-Oil Notes.

It is said that the oil mill at Tennille, Ga., owned by the Washington County Oil Co., has been sold to the Kentucky Refining Co. of Louisville, Ky. The plant sold for \$40,000.

The Bird Milling Co., which has mills in Memphis, Kennett, Mo., and Chattanooga, Tenn., will erect a cotton-oil plant at Hickman, Ky. The mill to be erected at Hickman will cost between \$40,000 and \$50,000.

The Farmers' Cotton Oil Co. of Wilson, N. C., has been chartered, with a capital of \$100,000, to manufacture soap, lard and fertilizer. The incorporators are T. J. Hadley, Thomas Felton, W. L. Felton and others.

Mr. N. W. L. Brown & Bro. of Alabama commenced work last week on a cottonseed-oil mill at Camden, Ark. The mill will be of sixty tons capacity. The plant will be completed and ready for operation upon the opening of the new cotton-crop season.

A charter has been granted to the Carroll Oil & Manufacturing Co. of Carrollton, Miss., with a capital of \$50,000. The incorporators are Leigh Fox, W. H. Neil, G. I. Redditt and others. The company will establish a cottonseed-oil mill, public gin and warehouse.

The Shubuta Oil & Manufacturing Co. at Shubuta, Clark county, Mississippi, has been chartered, with a capital of \$50,000. The incorporators are G. S. Weems, S. H. Floyd, W. L. Weems and others. The company will establish a cottonseed-oil mill, public gin and fertilizer factory.

It is reported that the Arkansas Cotton Oil Co. of Little Rock, Ark., has decided to expend \$150,000 in the betterments of its properties in Arkansas. A new mill to cost \$50,000 is to be erected at Lake Village, \$20,000 is to be expended at Fort Smith, and a new building 300x50 feet, two stories high, is to be built in North Little Rock.

The market for cottonseed products in Texas was unchanged last week, with the offerings moderate and stocks firmly held at the following quotations: Cottonseed oil, 39 cents for prime crude, and 41 cents for prime summer yellow; linters, according to quality, 2 1/2 cents to 2 3/4 cents, all f. o. b. mills at interior points in the State; prime cottonseed meal, \$25 per ton, and prime cottonseed cake, \$25 f. o. b. Galveston.

The oil-mill owners of the United States, acting through the special committee appointed at the convention of the Interstate Cottonseed Crushers' Association, which was held at Dallas, Texas, April 28, last week decided to organize a mutual insurance company. The company is to have a capital of \$200,000, and its principal office is to be in New York. It is proposed to have the stock subscribed by the owners of the mills throughout the country. A meeting of stockholders will be called within the next thirty days either at Memphis or New Orleans for the purpose of completing the organization of the company.

The following are the official quotations on cottonseed and cottonseed products as posted at the Cotton Exchange in New Orleans on the 2d inst.: Prime refined oil in barrels, 44 cents per gallon; off refined oil in barrels, 43 cents per gallon; prime crude oil, loose, 38 cents per gallon; off crude, nominal per gallon; prime cottonseed cake, \$27.25 per ton of 2240 pounds; off do., nominal; prime cottonseed meal, \$27.50 per ton of 2240 pounds; off do., nominal; soap stock, 1.40 cents per pound; linters, per pound—A, 3 3/4 cents; B, 3 1/2 cents; C, 3 1/4 cents; cottonseed in sacks delivered in New Orleans, \$16 per ton of 2000 pounds; in bulk delivered in New Orleans, \$15 per ton of 2000 pounds.

If you are thinking of enlarging your mill, factory or mine, or of purchasing machinery of any kind, send the Manufacturers' Record a postal card giving the character of the machinery needed.



**LUMBER.**

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

**LUMBER MARKET REVIEWS.****Baltimore.**

Office Manufacturers' Record,  
Baltimore, Md., June 4.

A fairly active tone has characterized the local lumber market during the past week, and the volume of trade shows more expansion in certain lines. The local building demand is becoming quite a feature among the transactions of the week, and considerable material will go into consumption for buildings and other improvements during the summer months. There is also a good distribution of lumber among yardmen, boxmakers and nearby towns. North Carolina pine is holding firm for all grades, and the demand is very steady from the domestic trade. The foreign inquiry is better, and exporters have inquiries from both the United Kingdom and Continental ports. White pine is firm for most grades, while the volume of business in this line is moderate. Cypress is steady, with a good inquiry. Hemlock and spruce are selling better, with an improvement in values. Poplar still occupies a leading place among commercial woods, and the demand is brisk from manufacturers of furniture and others. All hardwoods continue to show better form, and prices are very steady for oak, ash and other woods. The foreign trade in hardwoods is likely to improve, as American exporters and foreign buyers are soon expected to adjust their differences in regard to inspection and other matters. The foreign market is slowly improving, and stocks are being gradually reduced.

**Norfolk.**

[From our own Correspondent.]  
Norfolk, Va., June 2.

The conditions surrounding the lumber market in this section continue favorable, and the volume of trade during the month of May showed considerable expansion in almost every avenue of the industry. Of the market for North Carolina pine the outlook is most encouraging, and throughout the general list of grades and dimensions prices continue to rule firm, with the demand most satisfactory. In fact, mills throughout the North Carolina pine belt have all the orders they can handle, while the stocks at various milling points show but slight accumulation. Northern and Eastern buyers are in the market for large lots of lumber, and a number of good orders are coming from the Middle States. The foreign demand is said to be showing improvement, and considerable business is expected later on with the United Kingdom and Continental ports. Among planing mills there is increased activity, and large shipments of dressed lumber are going forward. In all woodworking concerns business is very brisk, and the prospects of a good business during the next six months are flattering. Lumber freights are steady, with rates unchanged. Last charters reported were the schooners Lizzie Carr, 272 tons, from Norfolk to Norwich with lumber at \$2.65, and Addie P. McFadden, 190 tons, from Chesapeake to Bath with timber at \$4.

**Savannah.**

[From our own Correspondent.]  
Savannah, Ga., June 2.

A quiet tone has characterized the local lumber trade at this port during the past week, and transactions have been light in volume. The demand, however, is steady, both from interior points and from Northern and Eastern centers. Mills at all points in Southern Georgia are working at their full capacity, and with present

orders are likely to be busy for sixty to ninety days. Shipments last week aggregated about 3,000,000 feet of lumber. Stocks of lumber at all milling sections are light, and lumber is generally shipped in many cases soon after leaving the saw. The cross-tie industry is very active, and the demand from railroads brisk. At Brunswick the market is active, with domestic and foreign shipments liberal. Millmen have all they can do to take care of the orders on file, and stocks at mills show little, if any, accumulation. The freight rates on lumber are steady, with charters as follows: Schooner Hugh Kelly, 698 tons, from Brunswick to New York or Perth Amboy with ties at 15½ cents; schooner Florence Leland, 281 tons, from Savannah to New York with lumber at \$5.50; schooner Marie F. Cummings, 489 tons, from Savannah to Philadelphia with lumber at \$5, and schooner Ellen M. Willey, 735 tons, from Brunswick to New York with lumber at \$5.50.

**Jacksonville.**

[From our own Correspondent.]  
Jacksonville, Fla., June 2.

During the month of May the movement in all lines of the lumber industry of this port was unusually active, and the lumber market very steady in tone, with a good demand for both cypress and yellow-pine lumber. Values throughout the list are unchanged, and for all desirable grades there is a good output. Saw-mills have all the business they can handle at the moment, and the indications are favorable for a good trade during the summer months. The record for May was better than usual, coastwise exports being as follows: Yellow-pine lumber, 11,227,521 feet; cypress lumber, 865,000 feet; laths, 125,000; cross-ties, 218,556, and shingles, 4,242,000. The foreign shipments were 479,515 feet of lumber; shingles, 8000, and cross-ties, 40,640. The Clyde Line steamers had a good business during the month, and sail vessels of desirable tonnage generally went out with full cargoes. It is stated that the increase in the business of the port is due to the fact that vessels are receiving a better price for lumber, while orders are also much heavier. During the month 110 vessels, representing a tonnage of 104,133, crossed the St. John's bar. Of this number twenty steamships and thirty sail vessels entered and cleared, all coastwise.

**Mobile.**

[From our own Correspondent.]  
Mobile, Ala., June 2.

The timber and lumber market during the past week has been fairly active, while prices of sawn timber continue to rule firm at 16 to 16½ cents per cubic foot. Stocks of sawn timber on the 27th ult. were increased about 10,000 pieces, and vessels arriving and due to arrive will clean the market up. Hewn timber is in light supply and the market steady at 15½ to 16 cents per cubic foot. Saw logs are firm at \$8 to \$10.50 per 1000 feet. The lumber trade is active, and the demand from South America is improving. Exporters are looking for an extensive trade with South Africa, as peace is now declared, and already there are inquiries out for cargoes among local shippers. The movement at Pensacola is improving, and large exports will be made through that port during the summer. The Sutherland-Innes Company has recently opened a branch office there, and during the past thirty days has purchased over \$40,000 worth of sawn timber. The firm will do a large exporting business, as the company has now several vessels under charter. The Reeses-Powell Company, Limited, of New Orleans has entered into negotiations for a big lot of sawn timber to be shipped out of Pensacola, and it is said

that Baars, Dunwoody & Co. will shortly enter business again. The prospects for a big shipping business through Pensacola during the present year are exceedingly bright. Timber freights continue steady, with a fair offering of tonnage. The following charters were reported last week: Schooner Tofa, 536 tons, from Apalachicola to Noank with sawn timber at \$7.25 and hewn at \$8.25; British steamer Cairnesk, 1462 tons, from the Gulf to West Hartlepool with timber at \$6/3, August, and brig Gabrielle, 416 tons, from Apalachicola or Pensacola to New York with lumber at \$7.25.

**Extensive Deal in Georgia Timber Properties.**

It is announced that a deal was closed last week at Atlanta, Ga., whereby Mr. H. M. Atkinson of Atlanta and Mr. T. Jefferson Coolidge of Boston become the owners of the Union Lumber Co. of Moultrie, Ga., and the Pineopolis Saw-Mill Co. of Colquitt county, Georgia. The two companies are valued at about \$2,000,000, and own 100,000 acres of some of the best virgin timber in the State. There are also two railroads in the transaction, the Tifton, Thomasville & Gulf, forty-seven miles in length, owned by the Union Lumber Co., and the Tifton & Moultrie Railroad, twenty-seven miles in length, owned by the Pineopolis Company. Messrs. Atkinson and Coolidge also come into possession of four large saw-mills. The combined companies, it is understood, will be financed by the Title Guarantee & Trust Co. of Atlanta.

**Lumber Notes.**

The Osborne Planing Mill Co. of Owensboro, Ky., has filed amended articles of incorporation, increasing its authorized capital from \$15,000 to \$30,000.

The Ragley Lumber Co. of Ragley, Panola county, Texas, has been chartered, with a capital stock of \$200,000. The incorporators are W. C. Ragley, M. J. Ragley and J. B. Wilson.

The Joe K. McInnis Furniture Co. of Hattiesburg, Miss., has been chartered, with a capital stock of \$20,000, to manufacture and sell furniture. The incorporators are J. K. McInnis, W. L. Logan and R. M. McInnis.

The Wynne Furniture Co. of Wynne, Ark., has completed its organization and elected the following board of directors: W. H. Newsom, A. H. Hammet, R. L. Block, J. M. Manning, G. E. Davis, E. J. Badinell and S. H. Osgood.

The following shipments of lumber from the port of Charleston were reported last week: Schooner James D. Dewell with 440,000 feet; schooner O. H. Brown with 822,600 feet, and schooner O. M. Marrett with 110,000 feet.

It is stated that the Whitesville Lumber Co. has been given an option by the North Carolina State board of education on all its swamp lands in Columbus county, North Carolina, at fifty cents per acre. There are some 30,000 acres.

Mr. E. W. West of Chester, Va., has purchased the timber of 600 acres, about 6,000,000 feet, in Brunswick county, Virginia. Mr. West will remove his mill to Warfield, and will ship lumber via the Seaboard Air Line from Bellwood Station.

The total shipments of lumber from the port of Jacksonville, Fla., for the month of May aggregated 12,092,521 feet, of which 11,227,521 feet were yellow pine and 865,000 feet cypress. Shipments of cross-ties for May amounted to 259,196, and of shingles 4,250,000.

The St. Louis & Arkansas Lumber & Manufacturing Co. of Arkansas City, Desha county, Arkansas, has been chartered, with a capital of \$100,000. The

officers of the company are Gains Pad-dock, president; Wm. Hays, secretary, and Henry Thane, treasurer.

The Mabie-McLure Lumber Co.'s mills at Mabie, W. Va., have shut down for three or four weeks to overhaul machinery, etc. These mills have run without interruption since last August. Work on the railroad and the cutting of timber will go on as before the suspension of operations on the mill.

It is announced that the Yellow Pine Lumber Co., owning large plants in Mobile, Ala., and at Yellow Pine, Ala., has dissolved, D. J. McDonald acquiring the saw-mill and other property in Mobile, and J. C. Miles acquiring the saw-mill plant and other property at Yellow Pine and vicinity. D. J. McDonald & Co. will organize a company to operate the plant at Mobile.

The J. W. Mahan Lumber Co. of Pratt, Kanawha county, West Virginia, has been chartered, with a capital stock of \$25,000. The incorporators are John Russell and Charles Russell of Ashland, Ky.; K. G. W. Davis, Catlettsburg, Ky.; J. H. Coleman, Williamson, W. Va., and John W. Mahan, Catlettsburg, Ky. The company will operate in the Cabin Creek district and carry on a general lumber business.

The Southern States Land & Timber Co. of New Orleans has been chartered, with a capital stock of \$2,500,000. The company will construct, acquire and operate saw-mills, sash, door and blind factories, turpentine stills, lease and convey real estate, timber lands, etc. The officers of the company are Pearl Wight, president; T. H. McCarthy, vice-president; John M. Dresser, secretary, and Maurice Stern, treasurer.

The walnut-log industry is one of the most important in Oklahoma. For the privilege of removing the dead and dying timber from the Territorial school lands, bidders are offering large sums, and the Secretary of the Interior has approved the sale of like timber from Indian allotments, the fund to be applied to the benefit of the Indians. The lands in the Osage, Kiowa and Comanche countries are very rich in the finest of walnut timber.

The C. C. Mengel, Jr., & Bro. Co. of Louisville, Ky., secured a permit last week to erect a mahogany mill in that city. The mill proper will cost about \$50,000, and the machinery in the neighborhood of \$50,000. The company will buy the mahogany logs in South America, have them shipped to New Orleans, and thence by rail to Louisville. It is understood that the Mengel Company has already contracted for millions of feet of mahogany, and that it will be in Louisville by the time the mill is ready for operation. The work of constructing the mill begins at once.

The efforts of the National Hardwood Exporters' Association to adjust the differences between exporters and foreign buyers, which have long existed, are likely to prove successful. The objections relative to contracts and inspection at foreign ports made by hardwood exporters have been considered, and foreign buyers now admit the justice of shippers' claims. The Timber Trades Federation of England and of the London dock companies have now submitted drafts of measurement rules which in the main accord with the views of exporters. The special committee appointed by the National Hardwood Exporters' Association to draw up a form of contract and inspection rules has completed its labors. If the labors of the committee are ratified by the association the British organizations will be informed, and it is thought that foreign buyers will accept the conditions presented by American exporters.

## MECHANICAL.

## 50,000-Volt Transmission Plant.

The transmission plant of the Missouri River Power Co. in its transmission of 50,000 volts over a distance of sixty-five miles

The amount of water in the river at this point is sufficient to develop 10,000 horsepower the year around.

The idea of a power plant at Canyon Ferry originated ten years ago. Not until six years later, however, did this idea take definite shape. Work was started on a

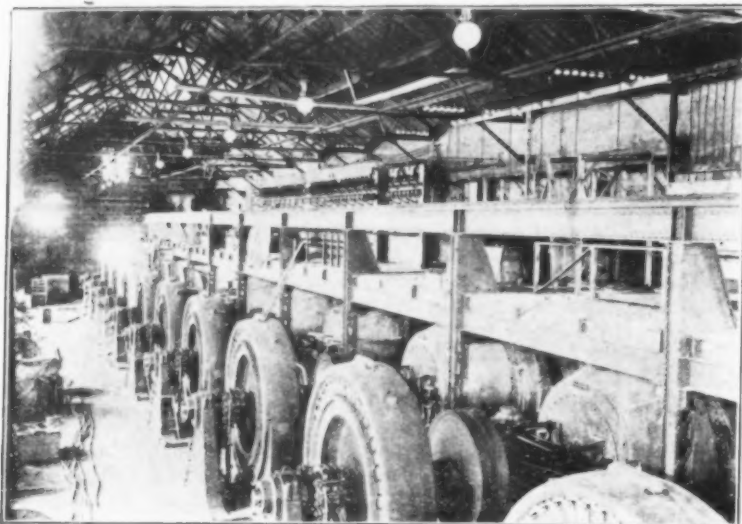


FIG. 1—GENERAL VIEW INSIDE OF POWER-HOUSE.

is said to have no parallel. It is also remarkable from the fact that since its installation no mishap has marred the plant's operation. The power-house is located on the Missouri river, about twenty miles east of Helena, Mont.

At the mouth of what was once known as the Black Rock canyon a dam was thrown across the Missouri about 480 feet in length, and designed to give a 30-foot head of water. The location of the dam at Canyon Ferry enabled the company to take advantage of a low-lying valley just above the entrance of the canyon, in which to hold at all times a large volume of water in reserve. At the upper end of the canyon the water spreads out over this valley, forming a reservoir about seven miles long by three miles wide. The canyon by which the water comes to the power-house is from 400 feet to 700 feet wide, and less than one-half mile long. The water in it does not freeze over in winter, and although the lake above freezes over, water flows to the power-house in winter absolutely free from ice.

plant of 4000 horse-power. It was decided in 1900 to raise the capacity of this plant to 10,000 horse-power. This was to be done by installing additional generators, with exciters, transformers, etc., and to extend the service to Butte, Mont., where it was understood all the power could be sold. To this end the company installed six additional 750-kilowatt Westinghouse generators with the necessary transformers, exciters, etc. These generators are of the same size and voltage as the first four, but are three-phase instead of two-phase. The water-wheels are 45-inch horizontal McCormick wheels furnished by S. Morgan Smith of York, Pa. All generators in the power-house are direct-connected to the wheels, flexible couplings being used throughout. With the new generators there was also installed a 225-kilowatt, 150-volt exciter, driven by a separate wheel, and a 115-kilowatt, 150-volt exciter, driven by an induction motor. To sum up, the power plant now consists of ten 750-kilowatt direct-connected generators, with four exciters, of which two are

90-kilowatt machines, direct-connected to separate wheels, one a 225-kilowatt machine with a separate wheel and one a 115-kilowatt motor-driven generator. The four old generators were overhauled and changed from two-phase to three-phase in order to make the plant uniform.

The switchboard gallery, shown on the right of Fig. 1, extends the whole length of the building, and, besides carrying the switchboards, carries also twelve 550 to 10,000-volt oil-cooled transformers for the Helena and East Helena service, as well as a plug board for connecting these circuits as needed under various conditions. The offices of the company will be located on the floor extending across the building at the end from which the view is taken.

The main switchboard and exciter switchboard shown in Fig. 2 are both relatively simple boards in design, but massive and substantial in construction. The main board is forty-seven feet four inches long, and consists of seventeen panels of blue Vermont marble two inches thick. The weight of the board complete is about

the end on each side supplies a bank of transformers, 550 to 50,000 volts, for the Butte lines. The middle panel is a junction panel, so that any set of bus-bars on the two ends of the boards can be thrown together, there being three sets of bus-bars on each end of a board. The instruments mounted on the board consist of eight 750-volt A. C. voltmeters, one for each set of buses and one at each end for the machines, independently of the buses; ten direct-current field ammeters, twenty-eight A. C. ammeters, with sixteen indicating polyphase wattmeters and six recording polyphase wattmeters. The recording wattmeters are behind the board. The exciter board consists of four panels of blue Vermont marble similar to the main board, one for each exciter, with two sets of bus-bars. All field rheostats are mounted under the gallery floor, and are controlled by hand-wheels, the shafts of which come up through pedestals in front of the boards.

The transformers at each end of the line consist of six 950-kilowatt oil-insulated

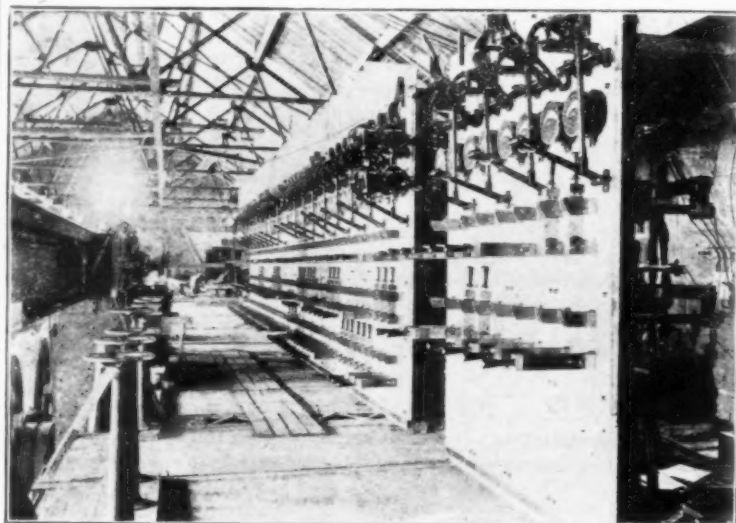


FIG. 2—MAIN AND EXCITER SWITCHBOARDS.

twenty tons, the copper alone being one-half of this weight. The general arrangement is as follows: The first five panels at each end are generator panels. The next two panels are feeder panels, and are intended for use with the 550 to 10,000-volt transformers. The eighth panel from

transformers with water-cooling coils in the cases. Those at Canyon Ferry transform from 550 to 50,000 volts, and at Butte the step-down transformer is made from 50,000 to 2200 volts. The secondary circuits at Butte consist of 600,000 c. m. bare copper cable.



FRONT ELEVATION, NORTH AUGUSTA HOTEL.

Work on the North Augusta Hotel, which is illustrated by the accompanying cut, is progressing rapidly, and the contractors confidently believe that the building will be completed by December. The left wing of the hotel is already up to the second story, and it will probably be under roof within a week or ten days. Considerable work of other kinds connected with the enterprise has been done already. For instance, the golf links have been located about a mile beyond the hotel, and on the line of the Augusta & Aiken Railroad, where the lay of the land is declared by experts to be admirably adapted for golf. There will be a course of eighteen holes, with a number of natural hazards, and the links laid off by experts, prepared with great care, will be ready for use when the hotel opens. The North Augusta Hotel Co. has been organized with the following officers: President, James U. Jackson; vice-president, John Blair MacAfee; general counsel, Henry Buist; general manager, W. M. Jackson; secretary and treasurer, L. F. Taliaferro; directors, James U. Jackson, J. B. MacAfee of Philadelphia, A. H. Rutherford of J. William McDondorf & Co. of Baltimore, R. Lancaster Williams of John L. Williams & Son of Richmond, Alfred S. Elliott of Wilmington, Del.; C. A. Linsley of Northfield, Mass.; Charles C. Goodrich, cashier of the Georgia Railroad Bank and president of the Equitable Trust Co.; Thos. Barrett, Jr., director in Equitable Trust Co. and president of Langley and Aiken Manufacturing companies and the Clearwater Bleachery; Walter M. Jackson, general manager of all the North Augusta companies.



All the electrical apparatus was furnished by Westinghouse Electric & Manufacturing Co. of Pittsburgh.

#### Special Trucks and Drays.

Firms requiring wagons, drays or trucks make a mistake to buy anything offered simply because it is offered, and with no regard to suitability.

Vehicles for special requirements may nearly always be had for the same price as the ready-made and frequently unsuitable product so often used.

W. P. Horner & Co., Danville, Va., make any and all kinds of wagons, drays and trucks for a most varied demand,

plying forced draft to a battery of boilers.

The Exeter Machine Works builds many other styles, comprising blowers, ventilating wheels, pressure-blowers, etc.

#### A New Shaper.

A recent fire destroyed all patterns covering the line of shapers manufactured by the American Tool Works Co. of Cincinnati. Profiting by an extensive experience with requirements, the company took this opportunity to effect a number of radical changes in sizes as well as detailed designs of the machines comprising the new line, and its new shaper is in every way a superior tool.

graceful, well-proportioned, compact appearance. The stroke is positive, and has five rates of speed. Its length may be changed at will without stopping the machine. The index shown in the cut facilitates the setting of the stroke to the

susceptible of fine and positive adjustments while in full operation, rendering it especially adaptable to toolroom work.

At Panther, W. Va., and adjacent points the lumber business is unusually



HORNER LOOP-END SPRING DRAY.

with especial attention to tobacco and farm wagons.

Tobacco drays, farm wagons, trucks, dump-carts, coal wagons, lumber wagons, transfer wagons, grocery wagons, racking trucks, leaf trucks, furniture and dairy wagons, all are strongly made by this firm.

The accompanying illustration shows a Horner loop-end spring dray. This wagon's side rails are plated with  $3\frac{1}{2} \times \frac{1}{4}$  plates, the two center rails with  $2\frac{1}{4} \times \frac{1}{4}$  plates, and has four standard holes in each; axles  $1\frac{1}{2}$  solid collar, steel, with case-hardened boxes; wheels, No. 1 Warner or Sarven patent,  $11\frac{1}{2} \times 5\frac{1}{2}$  round-edge tire.

#### Steel-Plate Steam Fan.

Readers will appreciate having their attention called to the steel-plate steam fan built by Exeter Machine Works of Exeter, N. H.

In addition to the style illustrated herewith (three-quarters housing), the wheel is made having top-horizontal or up-discharge outlets. This style fan is well adapted for all purposes where a large volume of air at moderate pressure is required, such as supplying air under boiler grates for forced draft, for hot-blast heating apparatus for factories, public buildings, schoolhouses, churches, etc., for drying lumber, leather-board, hides, knit goods, as well as in connection with a heater for the ventilation of buildings.

In this design the Exeter Machine Works has succeeded in producing a compact, perfectly-stayed and rigid case, the wheel being constructed to run in perfect balance at variable speeds without noise or vibration.

Connected with the steel framework of the casting is a substantial cast-iron engine-bed to support an engine, furnishing the driving power for the fan. The whole makes a self-contained and complete apparatus, liable neither to get out of order nor to require frequent adjustment, as is often the case when the engine is set on a separate foundation.

In this design the cost of an expensive foundation is saved, and without any sacrifice in efficiency or durability.

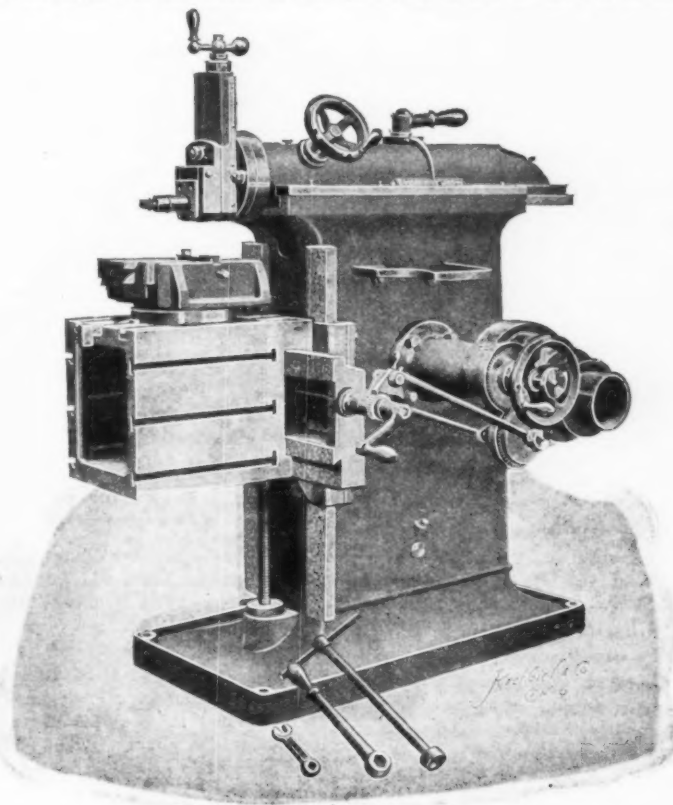
The apparatus as illustrated was sold to the Hazelton Electric Light & Power Co. of Pittston, Pa., to be used for sup-

The former line of shapers embraced the 15-inch, 17-inch and 21-inch crank, 16-inch back-geared crank, 26-inch and 28-inch triple-geared. The new shapers will appear as 16-inch plain crank, 16-inch, 18-inch, 21-inch and 25-inch back-geared crank, and 26-inch and 30-inch triple-geared.

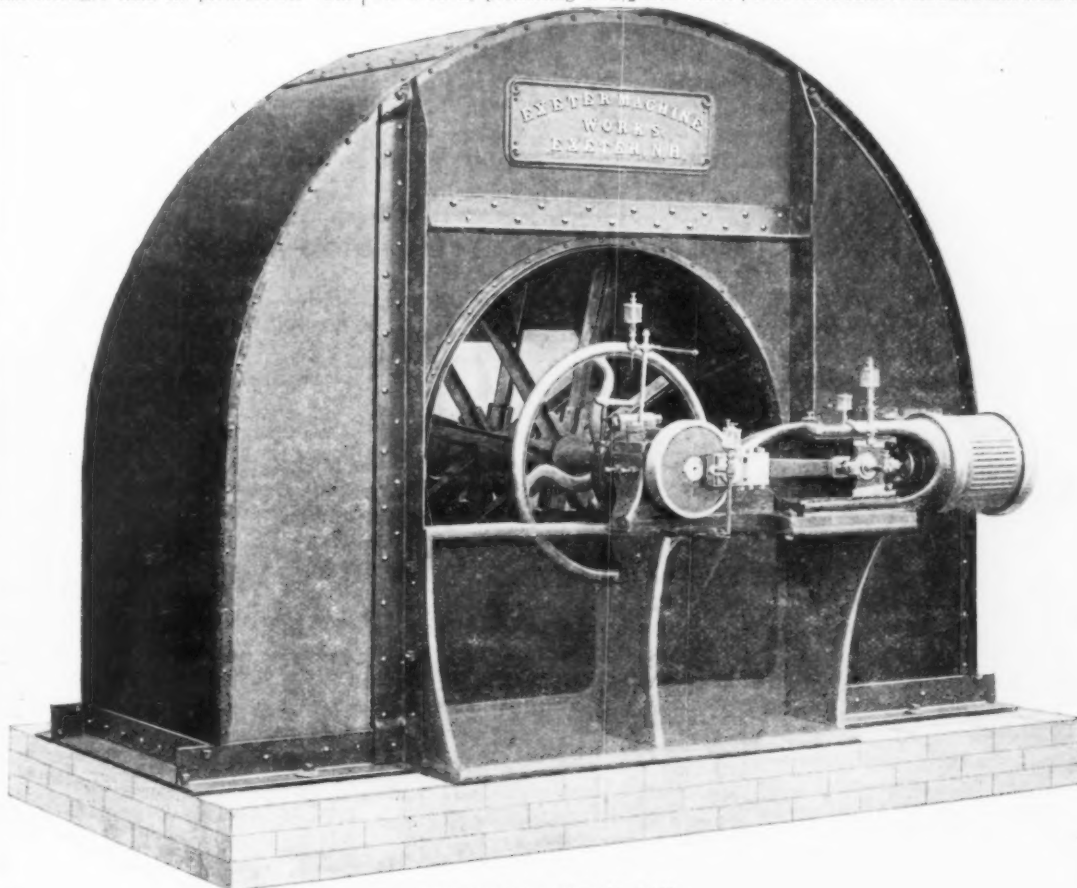
The first of these to be brought to completion are the 16-inch plain crank and the 16-inch back-geared crank shapers. We present an illustration of the completed machine. This shaper is heavier and stronger than its predecessor. The

length desired. The rocker-arm is pivoted near the base line, and this gives the ram an almost uniform rate of speed over its entire stroke and provides an exceedingly quick return. The rocker-arm is of double section, permitting a  $2\frac{1}{4}$ -inch shaft

brisk. W. M. Ritter of the Ritter Lumber Co. has just started on a new band-saw mill with a capacity of 50,000 feet a day five miles above the mouth of Dry Fork. The Long Pole Manufacturing Co. is about to remove its band mill from Long



A NEW SHAPER.



STEEL-PLATE STEAM FAN.

column, base, ram, table and so on have all been made of greater dimensions and weight, thus giving additional power and capacity to the machine, yet retaining its

to be passed under the ram through the hole shown in the top of the column for key-seating. This machine operates with convenience, ease and smoothness. It is

Pole creek to Wyoming City, below the mouth of Long Pole, on Tug river, where is has about 10,000,000 feet of timber to cut.

## PHOSPHATES.

### Phosphate Markets.

Office Manufacturers' Record,  
Baltimore, Md., June 4.

In the local phosphate market the movement is light, and receipts of rock also very light. Fertilizer men are only buying to supply immediate wants. The tone of trade at Southern mining localities is also quiet as to sales for prompt or future delivery. The development in deposits, however, is going forward as usual, and stocks of rock at several primary points show some accumulation. In Tennessee the market continues to show a firm tone, and considerable strength has been developed recently in both domestic and foreign rock at Mt. Pleasant. Florida rock continues to show a very steady tone, both in hard rock and pebble, and shipments from the ports for May were liberal. Miners in Florida are generally busy, and new and valuable deposits are being worked successfully. The demand is fair, but is mostly from foreign sources, and prominent companies are generally firm holders, and hesitate to make future long-time contracts at present prices. Matters in South Carolina mining sections are quiet, with the tone of the market unchanged.

### Fertilizer Ingredients.

The market for ammoniates has ruled slightly easier for prompt and near deliveries, and steady for future deliveries. The offerings of sulphate of ammonia are light, with values steady. Nitrate of soda is dull and easy.

The following table represents the prices current at this date:

Sulphate of ammonia (gas).....	\$3 10	62 3 15
Nitrate of soda, spot Balto.....	15	62 2 20
Blood.....	32 1/2	62 2 35
Asoline (beef).....	40	62 2 45
Asoline (pork).....	40	62 2 45
Tankage (concentrated).....	21 1/2	62 2 35
Tankage (9 and 30).....	21 00	62 2 35 1/2
Tankage (7 and 30).....	21 00	62 2 20 00
Fish (dry).....	27 50	62 30 00

### Pebble Phosphate in Polk County, Florida.

The Greenhead Phosphate Co. of Phosphoria, Fla., and Boston, Mass., has purchased 400 acres of land in Polk county, Florida, which is estimated to contain 4,000,000 tons of pebble phosphate. It is said to be the largest bed of phosphate in Florida, and to analyze 76 per cent. bone phosphate of lime, with 1 per cent. iron and alumina. The company has erected on this land a thoroughly modern plant, which is capable of producing 200,000 tons per annum. The company reports itself as well supplied with orders at fair prices, calling for deliveries covering the next three years.

### Phosphate and Fertilizer Notes.

The steamship Argyle cleared last week from Savannah, Ga., with 1021 tons of high-grade Florida phosphate rock for Bremen and 2540 tons for Hamburg, besides other cargo.

The Royster Guano Co. of Tarboro, N. C., has been chartered, with a capital of \$25,000. The incorporators are C. A. Johnson of Tarboro and C. F. Burroughs, W. S. Royster and F. S. Royster of Norfolk, Va.

It is announced that the Virginia-Carolina Chemical Co. and the German potash syndicate have reached a community of interests agreement, according to which there is to be no competition between them, and in future potash will be sold to the Virginia-Carolina Company on favorable terms. All the properties acquired in Germany by the Virginia-Carolina Company are to join the syndicate in Berlin.

It is reported that the Alabama Pyrites Co. has several thousand tons of pyrites

now mined at its plant at Pyriton, in Clay county, Alabama, and ready for shipment as soon as the Eastern Railroad of Alabama reaches that point. It is also announced that a large acid plant will be constructed at or near Talladega district, from Pyriton, about twenty-five miles southeast, for the manufacture of sulphuric acid.

The death of Mr. Thomas Hurly White, senior member of the firm of Thos. H. White & Co., merchandise brokers and dealers in fertilizer material, which occurred last week at his home in Baltimore, removes from local commercial circles one of the best-known business men of his time. Mr. White commenced his early business education with the firm of White & Elder of Baltimore in 1857, and all along down to 1874 occupied important positions in New York and Brooklyn, and as representative in those cities of sugar refiners in Baltimore. In 1874 Mr. White established the firm of Thos. H. White & Co. At the time of his death his business partners were Messrs. Harry M. Saxton, Ambrose Taney and P. L. Elder, the latter formerly of Baltimore, and now of Chicago.

The Consolidated Ice Manufacturing, Refrigerating & Fish Co., of Punta Gorda, Fla., previously noticed in the Manufacturers' Record, has commenced operations in the construction of its plant on an extensive scale. About \$400,000 is set apart for buildings and machinery, and about 2,000,000 feet of lumber will be required to complete the buildings. The freezing capacity is 300 tons of ice daily. The plant will further consist of a fertilizer factory, fish-rendering factory, oil refinery, cold-storage building, box and barrel factory, electric-light plant and machine shop. The company will also have a fleet of vessels engaged in the fishing trade. With the Peace river phosphate mines in close proximity, the company will have good facilities for the manufacture of fertilizers. Mr. E. B. Cornell is local manager, and the headquarters of the company is in the Drexell Building, Philadelphia.

### Western Maryland Deposits.

The Mercantile Trust & Deposit Co. of Baltimore has agreed to take on deposit from the city \$336,000 additional of the Western Maryland Railroad purchase money at 3 1/4 per cent. interest. The Security Storage & Trust Co. has agreed to take \$30,000 additional at the same rate. This makes a total of \$3,984,000 which have been provided for.

### American Engineers in England.

[London Iron and Coal Trades Review.]

An interesting phase of the recent movement for the adoption of the latest American ideas and practice in Great Britain is the increasing tendency to employ American engineers, both for special and for ordinary every-day work. We have already noticed the fact that one of the American specialists has been employed to reconstruct blast furnaces at the Consett, Cleveland, and Dowlais Works on American lines, and that Mr. Axel Sahlin has succeeded at Askam in building a furnace on kindred lines which has turned out over 300 tons a day on a 45 per cent. to 48 per cent. ore. Mr. Sahlin, of course, is an engineer whose main experience has been gained in the United States, although he is of Swedish origin. The new blast furnace manager of the Dowlais and Cardiff-Dowlais furnaces is Mr. Arnold K. Reese, who was formerly manager of the blast furnaces at Lebanon and at Sparrow's Point, near Baltimore, and who is understood to have been engaged for a term of years at a salary of £3000 a year, which, it may be noted, is a salary con-

siderably in excess of the average paid to men so employed in the United States. The general manager of the Dowlais and of the Dowlais-Cardiff Works is now Mr. Wm. Evans, formerly of the Cyfarthfa Works, and still in chief control of Cyfarthfa, since these works were acquired by Guest, Keen & Co.

### TRADE NOTES.

**Machinery Contract.**—The Cardwell Machine Co. of Richmond, Va., has just been awarded a large contract by the newly-chartered Woodville (Miss.) Oil & Manufacturing Co.

**Filter Installation.**—The Pittsburg Gage & Supply Co., Pittsburg, Pa., will install at once one of its complete "White Star" filter systems for the Allis-Chalmers Company, Chicago.

**Medal for Felton & Son.**—S. A. Felton & Son Co. of Manchester, N. H., and Boston, manufacturer of mill brushes, received a gold medal from the Charleston Exposition for the excellence of its exhibit.

**Foundrymen's Meeting.**—At a meeting of the Foundrymen's Association this week in Philadelphia Mr. A. G. Warren, M. E., of J. W. Paxson Company, read a paper on "Paxson-Warren Sand-Blast System."

**Ball and Westinghouse Machines.**—The Ball Engine Co., Erie, Pa., and the Westinghouse Electric & Manufacturing Co., Pittsburg, are installing the steam plant and generators, respectively, for West Tampa's new electric-power plant.

**Want Timber?**—If so, address W. H. Hardin, Waynesville, N. C. We should certainly say he has it "to burn" or for any other purpose, considering the fact that he wishes to interest investors in 800,000,000 feet of Virginia and North Carolina timber.

**Brickmakers, Attention!**—Note the fact that the Fernholtz Brick Machine Co. of St. Louis has moved to Boyle avenue and Old Manchester road. Its announcement to this effect is a clever idea. The firm's plant is considered one of the finest for its size in the country.

**Harding & Gooch Dissolve.**—Notice has been received of the dissolution of the architectural firm of Harding & Gooch of New York. The same mail contains the announcement that W. L. Gooch, junior member of the above firm, has been admitted to the establishment of Charles H. Davis & Partners.

**Refinery Equipped.**—Rockwell Engineering Co., 26 Cortlandt street, New York, claims to have landed the largest order for oil burners yet placed in the South. A contract has just been closed to equip the J. M. Guffey Petroleum Co., Port Arthur, Texas, with three of the largest sized pumping systems and 150 burners.

**Filters and Exhaust Heads.**—Burt Manufacturing Co., Akron, Ohio, recently made a large shipment of its Cross oil filters and exhaust heads to Buenos Ayres, Argentine Republic. The company reports an unusually active foreign demand, other shipments having been lately sent to England, Austria, Belgium, Mexico and countries in the Far East.

**Feed-Water Heaters Sold.**—The Stilwell-Bierce & Smith-Valle Company, Dayton, Ohio, is transacting an extensive business in feed-water heaters, judging from a long list of sales received. Last week this company shipped orders of various sizes to points in twelve States and in Mexico. In some instances two orders were shipped to different points in the same State.

**Orders for Hicks.**—Hicks Locomotive and Car Works, 255 Dearborn street, Chicago, is in receipt of the following orders: Ten new box cars, 50,000 pounds capacity, and one 50-ton freight engine to be rebuilt for the Choctaw Construction Co.; two combination coaches to be rebuilt for the C. R. & M. R. R., and forty flat cars, 60,000 pounds capacity, to be rebuilt for the L. E. & D. R. R. R.

**Notice of Removal.**—It must be with satisfaction that the men who begin with an enterprise in its infancy and remain with it through adversity realize that their work is crowned with merited success. Being able to announce its removal from present quarters after fifty years of continuous occupancy to more extensive apartments on Atlantic avenue must give some such feeling to the members of Edson Manufacturing Co. of Boston, manufacturer of contractors' hand pumps.

**Matern Company Removes.**—When business increases so rapidly that the old plant is completely outgrown, nothing remains to be done but move. This is the happy lot of the Matern Manufacturing Co., 1915-19 Pine street, St. Louis. This company has secured quarters more extensive on Eighteenth street, built especially for it. The Matern Company's specialty is steam piping for high-pressure power plants.

**Orders for Ingoldsby Company.**—The following orders for cars have just been closed with the Ingoldsby Automatic Car Co., Chemical Building, St. Louis: Five hundred \$2,000-pound dumping coke cars, to be made of steel; ten 100,000-pound standard-gauge dump cars of steel for the New Union Sand Co. of St. Louis, and three of the same for the Texas Short Line. These cars will be built by the Structural Steel Car Co. of Canton, Ohio.

**Sterling Iron Works.**—Sterling Iron Works, Springfield, Mo., has completed installation of a 25-ton plant for Queen City Ice & Refrigerating Co. The test run has been made, and was so entirely satisfactory to the owners that complete settlement was made immediately. The Sterling Iron Works has been manufacturing ice machinery for twelve years, and the success of its machines has won for them a most enviable reputation. It is said they never have made a failure.

**High Vacuum Condenser.**—It seems strange for Westinghouse to be buying machinery from others, but that company recently had occasion to order a very important condensing equipment from the Alberger Condensing Co., 35 Liberty street, New York, for its East Pittsburg works. The equipment consists of an 8000 square foot surface condenser of the Alberger high vacuum type, a Corliss two-stage dry-vacuum pump and a centrifugal circulating pump. This outfit maintains a 28-inch vacuum.

**Punching Machines.**—A machine adapted to a large variety of work should be valuable. Such a machine is said to be the "Duplex" punching machine, made by Edwin B. Stimpson & Son, 31 Spruce street, New York. It is used for punching holes in loose leaf ledgers, sermon paper, bills, calendars, leather, celluloid and thin metal. The "Star" is a similar machine, but smaller, and operated by hand. Wire staple binding machines are also made by this firm, especially to order.

**Good Gaskets.**—Ordinary gaskets are constructed of copper and asbestos or aluminum and asbestos. In constructing gaskets of special packing, encased in soft rolled metal, McCord & Co. of Chicago claims superiority. This company claims that its "McKim" gasket contains the strength of the ordinary copper gasket and the elasticity of the packing gasket. Be that as it may, the "McKim" gasket is guaranteed to stand 450 pounds steam pressure, and has stood 1100 pounds hydraulic pressure.

**Railway Equipment.**—One hundred and seventy-five second-hand engines, but in first-class condition and of all sizes, flat cars, box cars, tank cars, baggage cars, coaches and private cars, narrow-gauge locomotives and railway equipment of almost every conceivable kind are for sale by F. M. Pease, 277 Dearborn street, Chicago. The list is a heavy one, and comprises the greatest variety of fine second-hand equipment. Write for any additional information desired. This is a valuable opportunity.

**Alexander City Progress.**—A town with a development association and with citizens public-spirited enough to spend their money for this association's maintenance is unquestionably progressive. Such a town is Alexander City, Ala. The following is the list of officers of this town's industrial and development association just elected: President, Benj. Russell; secretary, A. P. Fuquay; treasurer, H. A. Thornton; vice-presidents, J. C. Manning, T. W. Harris, M. Herzfeld, A. L. Harlan, F. O. Hooton, G. A. Sorrell and E. P. Duncan.

**Extending Typewriter Works.**—Shrewd business men consider the condition of the typewriter business a good index of the general commercial situation. Couple with this the statement that one of the greatest typewriter works in the world is doubling the capacity of its already enormous plant, a good indication of prevailing trade conditions results. The announcement has reached the Manufacturers' Record, through its Baltimore office, Wyckoff, Seamans & Benedict of 131 East Baltimore street, that the Remington Typewriter Co. is now pushing the work on its new buildings to the utmost in order to greatly increase the present product, which is already enormous.



# CONSTRUCTION DEPARTMENT.

**THE MANUFACTURERS' RECORD** seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with every one interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

\*Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery Wanted."

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the Manufacturers' Record.

It often occurs that the organization of a new company in a town is not known by the postmaster, and hence letters addressed to the company are returned marked "not known." The Manufacturers' Record reports the first organization of all companies, and our readers, in seeking to get into communication with them, should be very careful in deciding how to address them, and it is often advisable to add the names of one or more incorporators as an aid to the postmaster in delivering mail.

## ALABAMA.

Alexander City—Knitting Mill.—Russell Manufacturing Co. will double the capacity of its knitting mill.

Aniston—Gold Mines.—Rev. W. M. Taylor of De Sota Gold Mining Co. of Texas has leased and will develop gold-bearing properties near Aniston.

Bessemer—Boiler Works.—Birmingham, Bessemer and Indiana capitalists will build a plant to cost about \$100,000 for manufacturing locomotive boilers and similar machinery.

Bessemer—Iron Mines.—It is stated Shades Valley Iron Co. is about to apply for incorporation with purpose of developing iron-ore deposits in Shades Valley, near Bessemer. B. F. De Bardeleben of Birmingham and associates have been prospecting for ore on this land.

Birmingham—Machinery Warehouse.—Miller & Kettig Hardware Co. will increase capital from \$150,000 to \$500,000.

Birmingham—Cotton Mill.—Milton H. Smith, Louisville, Ky., president of Louisville & Nashville Railroad, has authorized Frederick and MacIn Sloss of Birmingham to offer 640 acres of coal lands as an inducement to cotton mills to locate in the district.

Birmingham—Ore Mines.—John H. Peebles of Mooresville, Ala., and others who have interests in Limestone county are hopeful of organizing an ore-land development company or of securing a company to work properties in this section. No definite arrangements have as yet been made.

Birmingham—Ore Mines, Coke Ovens, etc. De Bardeleben Coal & Coke Co., W. P. Pinckard, president, will begin the development of its ore properties on a more extensive scale, and is also planning to build 200 coke ovens.

Boaz—Cotton-oil Mill.—Boaz Cotton Oil Co., previously organized with capital of \$35,000, has incorporated and elected J. H. Sneed, president; R. R. McCloskey, general manager, and W. E. Sneed, secretary.

Bolling—Land Improvement.—W. C. Shackelford, R. F. Kolb and P. Sid Jones have purchased the town of Bolling, including 30,000 acres, and will improve the property, utilizing the land for truck farms, vineyards, etc.; new hotel will be erected and other improvements made.

Ensley—Electric-light Plant.—W. T. Terry has applied for franchise for electric-lighting plant.

Florida—Lumber Mills.—Jackson Lumber Co. (recently mentioned in connection with extensive purchases of timber lands, etc.) plans extensive developments of the properties acquired. It is proposed to increase capital from \$1,000,000 to \$2,000,000; this amount is represented by \$1,000,000 for the timber investment, \$300,000 by new mill plant to be built and \$200,000 as a reserve for contemplated additions to present plant. New equipment will consist of two band saws and a 48-inch gang saw with capacity of 250,000 feet per twenty-two hours, to be doubled later; planing mill capacity will suit the saw, and brick dry-kilns with capacity of 160,000 feet will be equipped; power plant will have capacity of 15,000 horse-power. The company's holdings now aggregate about 100,000 acres in Alabama and 41,000 in Florida. W. S. Harlan is general manager. Contract for most of the machinery has been awarded.

Jasper—Coal Mines.—Calumet Coal Co., capital stock \$50,000, will be organized by R. C. Middleton of Birmingham, J. H. Bankhead, Jr., of Jasper and others, to develop mines.

Linden—Oil Mill.—Southern Cotton Oil Co. has contracted for cottonseed-oil mill and ginnery to cost \$75,000.

Marion—Cotton-oil Mill.—Messrs. Preston of Orange, N. J., are investigating with a view to erecting \$65,000 cottonseed-oil mill in Marion.

Sheffield—Cotton Mill.—It is rumored a large cotton mill will be erected, and J. W. Worthington is mentioned in connection with the enterprise.

Talladega—Sulphuric-acid Plant.—It is reported that a large plant for manufacture of sulphuric acid will be established at or near Talladega. Alabama Pyrites Co. may possibly be able to give information.

Troy—Woodworking Factory.—V. E. Hanchey is improving his sash, door and blind factory and saw-mill.

Tuscaloosa—Lumber Mill.—Tuscaloosa Lumber & Manufacturing Co., lately reported incorporated, has \$11,000 capital paid in, and will operate saw and planing mills.\*

## ARKANSAS.

Arkansas City—Lumber Manufacturing.—St. Louis & Arkansas Lumber Manufacturing Co. has been incorporated, with Galus Paddock, president; Wm. Hays, secretary, and Henry Thane, treasurer; capital stock is \$100,000.

Camden—Oil Mill.—N. W. L. Brown and brother will build cottonseed-oil mill at Camden, as lately reported, installing a three-press mill with daily capacity of sixty tons. Site, machinery and materials have all been purchased, and plant will be operated as the Camden Oil Mill.

Devall's Bluff—Gin and Flour Mill.—Devall's Bluff Gin & Milling Co. has been incorporated, as recently reported, for erection of gin with capacity for fifty bales of cotton per day (contract for machinery awarded), and for flour mill; machinery for flour mill has not been purchased; J. M. Richardson, president.\*

El Dorado—Cotton Compress.—El Dorado Compress Co. has been incorporated, with capital of \$40,000, by E. H. Lake, J. S. Alphin, E. H. Smith and others.

Helena—Sewer System.—Theodore Hartman of Little Rock, Ark., has been engaged to repair and complete the city's uncompleted sewer system.

Knobel—Mercantile.—Chartered: Seilinger Mercantile Co., with capital of \$12,000, by Jos. Seilinger (president) and others.

Little Rock—Lumber Company.—Marquette Timber Co. has been incorporated, with capital stock of \$100,000, by J. L. Kressmann, Frank F. Savage, S. M. Savage and others.

Little Rock—Cotton-oil Mill.—Arkansas Cotton Oil Co., Harry F. H. Eberts, manager, will expend \$150,000 in improving its Arkansas properties; new mill to cost \$50,000 will be erected at Lake Village; \$20,000 will be expended on improvements at Fort Smith, and a new two-story building 300x50 feet will be erected in Little Rock.

Little Rock—Printing Plant.—J. N. Heskell of Louisville, Ky.; C. W. and Fred Heskell of Memphis, Tenn., and Maxwell Coffin of Little Rock have purchased Arkansas Gazette and printing plant, and will continue same. New printing press, additional type-

setting machines and other equipment will be installed.

Little Rock—Ice Factory.—Retail Grocers' Association has organized the Retail Grocers' Ice Co. for manufacture of ice.

Little Rock—Ice Factory.—Consumers' Ice Co. has been incorporated, with capital of \$10,000, by F. L. Riggs, president; J. B. Marshall, vice-president, and A. Riggs, secretary.

Warren—Stave Mill.—Warren Stave Co. will erect a new and larger mill.

Wynne—Furniture Company.—Wynne Furniture Manufacturing Co. has been organized by W. H. Newsom, A. H. Hammett, R. L. Block and others.

## FLORIDA.

Bay City—Turpentine Plant.—J. A. Henson will rebuild his turpentine distillery, burned at a loss of \$4000.\*

Jacksonville—Drug Company.—B. F. Bowen, Richard P. Marks and H. W. Ellison have incorporated International Drug Co., with capital of \$25,000.

Orange—Timber Company.—W. H. Gunn, W. A. Lewis, W. H. Gunn, Sr., have incorporated Gunn & Gunn Company, with capital of \$2000, to deal in logs, timber and land.

Orange—Paper Mill.—Florida Paper Co., Box 184, Pensacola, Fla., will remove its plant to Orange; capacity will be fifteen tons daily; Mr. McDonnell, architect in charge.

Phosphoria—Phosphate Mines, etc.—Greenhead Phosphate Co. of Phosphoria and Boston, Mass., has purchased 400 acres of land, estimated to contain 4,000,000 tons of pebble phosphate. Company has erected plant capable of producing 200,000 tons per annum; H. N. Smith, secretary, 35 Congress street, Boston.

Punta Gorda—Fish-fertilizer Factory, Oil Mill, etc.—Consolidated Ice Manufacturing, Refrigerating & Fish Co., reported at length last October, is proceeding with construction of plant, about \$400,000 being available for buildings and machinery. Plant will include 300-ton ice factory, fertilizer factory, fish-rendering equipment, oil-refining apparatus, 5000-ton cold-storage plant, electric-light plant, box factory, etc. Company will also operate a fleet of fishing smacks off the Gulf coast. E. B. Cornell is local manager; headquarters in Drexel Building, Philadelphia, Pa. (Capital stock is said to be \$5,000,000).

## GEORGIA.

Atlanta—Car-wheel Foundry.—St. Louis (Mo.) Car Wheel Co. has purchased site in Atlanta and will erect a branch plant; building to be erected will be 35x230 feet, with wings for engine and boiler house, coke ovens and cupola, etc.; will cost about \$75,000.

Atlanta—Ironing-table Factory.—David A. Sox of Carroll county, D. W. Broadwater of Coweta county and others have incorporated Table Improvement Co., with capital of \$10,000, and privilege of increasing to \$100,000, for the manufacture of a patent ironing table.

Atlanta—Bridge Works.—J. T. Rose and W. M. Kelly of Atlanta and W. T. Young of Tennessee have incorporated Cotton States Bridge Co. for construction of steel and iron works, to contract for bridges, etc. Capital is \$10,000, with privilege of increase to \$200,000.

Atlanta—Shoe Company.—W. R. Mann and T. S. Lewis, Jr., have incorporated Mann & Lewis Company to manufacture and deal in shoes, capital being \$10,000, with privilege of increase to \$25,000.

Augusta—Underground Conduits.—Augusta Telephone & Electric Co. has applied to city for franchise to construct underground conduit and subway system.

Augusta—Brick Works.—Richard B. Morris, J. L. Hankinson, Arthur H. Merry, John C. Hagler, Bernard S. Dunbar and others have incorporated Georgia-Carolina Brick Co. for manufacturing brick, sewer pipe, tiling, etc. Capital is \$10,000, with privilege of increase to \$50,000.

Columbus—Telephone System.—Southern Bell Telephone Co. will extend and improve its system in and around Columbus.

Columbus—Bridge.—Contract for erecting substructure of Fourteenth street bridge has been awarded to B. H. Hardaway for \$24,000. Contract for superstructure was awarded some time ago to the American Bridge Co. at \$35,000.

Lumpkin—Water-works.—City is erecting large pumping station and reservoir prepar-

atory to installation of \$10,000 water-works. Address "The Mayor."

Macon—Lumber Mills.—G. M. Davis, J. L. Davis and R. C. Postell have incorporated Davis Lumber Co., with capital of \$10,000, for manufacture of lumber, etc.

Statesboro—Water-works and Electric Plant.—It is said that electric-light and water-works will be constructed, and I. A. Bramer is interested.

Vienna—Cotton Compress and Ginnery.—Vienna Cotton Oil Mill Co. has purchased for \$6500 D. V. Thompson's cotton ginnery and roundlap compresses, and will operate same in connection with a 40-ton cottonseed-oil mill to be installed.

Watkinsville—Cotton Ginnery.—Southern Cotton Oil Co. (Montgomery, Ala.) will erect ginnery at Watkinsville.

Waycross—Sugar-cane Mill.—I. M. Nelson of New Orleans, La., is investigating with a view to establishing a sugar-cane mill and evaporator in Waycross with daily capacity of 400 tons.

Waycross—Syrup Refinery.—Capt. D. G. Purse of Savannah, Ga., and O. M. Nelson of New Orleans, La., have made a proposition to aid in the erection of a \$20,000 syrup refinery at Waycross with capacity of 300 tons per day.

West Point—Water-works.—City will issue \$10,000 of bonds for construction of water-works. Address "The Mayor."

## KENTUCKY.

Ashland—Oil Wells.—Flat Rock Oil & Gas Co. has been organized by Dr. Cray Martin and others for development of oil properties.

Cainey—Coal Mines.—J. E. Cooper of Mt. Sterling, Ky., and associates have purchased canal coal mines for \$20,000.

Glasgow—Gas and Oil Wells.—Empire Oil & Gas Co. has been incorporated by J. S. Leech, W. B. Smith, Brents Dickinson, R. P. Moran, J. A. Cully, J. M. Richardson, T. P. Dickinson and George R. Lewis of Glasgow, P. W. Grinstead of Lexington, Ky., and R. E. Grinstead of Salem, Neb., with capital of \$25,000, to drill for gas and oil.

Glasgow—Oil Wells.—Empire Oil & Gas Co. has been incorporated, with capital of \$25,000, for development of oil properties, by T. P. Dickinson, J. M. Richardson, R. P. Moran and others.

Greenville—Coal Lands.—Pennsylvania capitalists have purchased 1000 acres of coal, iron and fire-clay lands at about \$20,000, and will organize Mud River Coal Co. to thoroughly develop the property. Address company, care of J. J. Ryan.

Hickman—Cotton-oil Mill.—Bird Milling Co. of Chattanooga, Tenn., will erect \$50,000 cottonseed-oil mill at Hickman.

Hopkinsville—Milling.—Crescent Milling Co. will enlarge its storage capacity by erecting two-story brick building.

Hopkinsville—Handle Factory.—J. W. Harwood & Bro. will erect large handle factory at Hopkinsville to replace one recently burned at Adams, Tenn.

Louisville—Lumber Mill.—C. C. Mengel, Jr., & Bro. Co. will build mahogany lumber mill at cost of \$75,000.

Louisville—Electric-light Plant.—Citizens' Lighting Co. will erect three-story brick addition and install 1200-horse-power lighting generator and 1200-horse-power power generator, etc.; cost will be about \$25,000.

Owingsville—Oil Wells.—Diamond Oil Co. of Lexington, Ky., has leased and will develop oil properties.

Paducah—Distillery.—Paducah Distilleries Co. has been incorporated, with capital of \$3000, by M. J. Friedman, H. Friedman and others.

Williamsburg—Electric-light Plant.—Dr. A. Gathiff and Professor Dayless of Greenfield, Ohio, have purchased the Williamsburg electric-light plant.

## LOUISIANA.

Abbeville—Mercantile.—Merchant Grocery Co. has organized, with Eli. Wise, president, and capital of \$20,000.

Bunkie—Brick Works.—Bunkie Brick Works, reported recently as incorporated, will build works of 30,000 daily capacity, and has not contracted for machinery. Address W. D. Haas, president.\*

Diamond—Irrigation Improvements.—Illinois parties represented by J. F. Miller of Springfield, Ohio, have purchased 40,000 acres of swamp lands from the Lake Borgne levee

board, and will organize \$5,000,000 company for draining the lands by means of canals, after which the land will be sold for agricultural purposes.

**Donaldsonville—Iron Works.**—Donaldsonville Iron Works, Ltd., has been organized, with capital of \$25,000, and directors, Char. Mourin, Jos. Constantine, John W. Tucker, Henry McCall, J. N. Colomb, C. R. Allemen and others. Company will continue Donaldsonville Foundry and Machine Works.

**Homer—Electric-light Plant.**—Town will vote June 26 on issuing \$10,000 in bonds for electric-light plant. Address "Town Clerk."

**Morse—Rice Mill.**—The \$50,000 company reported last week will be known as Morse Rice Mill Co., Ltd. J. A. Petty has prepared plans; capacity will be 100 barrels per day; fuel consumed will be crude oil; contract for machinery has been awarded. C. F. Matthews is secretary.

**New Orleans—Lumber Company.**—Carroll, Scott & Douglass Co., Ltd., has been incorporated, with capital of \$10,000, to export and import lumber, etc. Philip Dippacher is president; Francis Carroll, vice-president, and Henry H. Scott, treasurer.

**New Orleans—Lumber Mills, etc.**—T. H. McCarthy, John M. Dresser, Edward Wisner and others have incorporated Southern States Land & Timber Co. for manufacture of sash, doors, blinds and general building materials, construction of sawmills, development of timber lands, etc. Capital stock is \$2,500,000.

**Thibodaux—Electric Plant.**—New Orleans & Southwestern Railroad Co. has awarded all contracts for construction and equipment of its electric plant, and will furnish light and power along the line to New Orleans; shops will also be erected. C. R. Young is general manager.

#### MARYLAND.

**Baltimore—Paper Company.**—Incorporated: Bradley-Kirkman-Reese Company, to manufacture and deal in paper, by James E. Bradley of Fredericksburg, Va.; Percy V. Kirkman of High Point, N. C., and Gordon L. Reese, H. Newton Schilling, Theodore K. Miller, Jr., and J. Harry Spencer of Baltimore; capital stock is \$25,000.

**Baltimore—Ice Plant.**—Hammond Ice Co. is arranging for erection of another factory with capacity of 450 tons of plate ice per day, and to cost, with storage houses, \$700,000.

**Baltimore—Linen Manufacturing.**—Pine Oil Liniment Co., by Nelson Marye, George C. Stokes of this city, and Joseph C. Whitney, Harold Walsh and Arthur Stewart; capital stock \$10,000.

**Baltimore—Shoe Company.**—Chartered: Carroll, Adams & Co., with capital of \$150,000, for dealing in boots and shoes, by Wm. C. Carroll, John M. Adams and others.

**Baltimore—Beehive Power Plant.**—Arthur Stewart has proposed plans to the Merchants and Manufacturers' Association for erection of a series of buildings, with modern facilities for manufacturing, including power, heat and light, for the purpose of inducing manufacturers to locate in Baltimore.

**Baltimore—Fertilizer machinery Works.**—A. J. Sackett will rebuild plant recently destroyed by fire; will erect brick building 48x112 feet and equip with the latest improved machinery for manufacturing fertilizing machinery.

**Baltimore—Garbage Crematory.**—Baltimore Sanitary Contracting Co., Frank A. Furst, president, has purchased site for proposed garbage crematory and contracted for machinery for the equipment; the capacity will be 200 tons daily; plant will cost about \$250,000.

**Cumberland—Oil Wells.**—A. H. Brockett, A. D. Foster and T. H. Stewart of Pittsburg, Pa., will lease and develop oil lands on Potomac river.

**Frostburg—Coal Mines.**—Rock Vein Coal Co. has been chartered with president, G. W. Biser; vice-president, J. Frank Fields; secretary, T. H. B. Dawson; treasurer, A. M. Mendenhall. Capital stock is \$200,000, and the company will develop about 6000 acres of coal land containing four veins of bituminous coal, varying in thickness from three to six feet. Address A. M. Mendenhall, treasurer, at Berkeley Springs, W. Va.

**Hyattstown—Gold Mining.**—John Rothrock of Steelton, Pa., has leased properties near Hyattstown and will erect \$10,000 worth of machinery for making experiments in gold mining.

**Pocomoke City—Electric Plant.**—W. H. Walters will enlarge his electric plant.

**Washington, D. C.—Real Estate.**—Louis P. Shoemaker Real Estate Co. has been incorporated, with capital of \$25,000, by Louis P. Shoemaker, Charles A. Casey, Wm. O. Ray and others.

**Washington, D. C.—Steam Laundry.**—Char-

tered: Howard Laundry Co., capital stock \$8000, by Frank Goodwin, Mabel Goodwin, Henry Stine, T. Hill Marshall and Blanche Marshall.

#### MISSISSIPPI.

**Carrollton—Oil Mill.**—Incorporated: Carroll County Oil Manufacturing Co., capital stock \$50,000, by Leigh Fox, W. H. Neil, G. I. Reditt and others, to establish public cotton gin, oil mill and warehouse.

**Centreville—Water works.**—H. C. Jenks has been appointed engineer of the proposed water-works system recently reported. City will vote July 1 on issue of \$15,000 of bonds for construction and will advertise for bids according to engineer's plan.

**Gloster—Mercantile.**—Incorporated: J. H. Hines Company, capital stock \$10,000, by J. H. Hines, S. E. Connerly, W. R. Fly and others.

**Hattiesburg—Furniture Company.**—Incorporated: J. K. McInnis Furniture Co., to manufacture and sell furniture, with a capital of \$20,000, by J. K. McInnis, W. L. Logan and R. M. McInnis.

**Magnolia—Cotton Oil Mill.**—Sam Hyman, Thad. B. Lampton, Sam Abrams and others have organized \$40,000 company for erection of cottonseed-oil mill.

**Meridian—Fertilizer Factory.**—Meridian Fertilizer Co. will increase capacity of its works to 50,000 tons per annum.

**Natchez—Oil Wells.**—Natchez (Miss.) & Marksville (La.) Oil Co. has organized with Jas. W. Lambert, president, and L. A. Bidler, general manager, to drill for oil.

**Perrington—Mercantile.**—C. H. Brown, Alexander Orr and others have incorporated Brown-Orr Mercantile Co., with capital of \$20,000.

**Raymond—Electric and Water Works.**—Town is considering the construction of electric plant and water-works. Address the "Town Clerk."

**Shubuta—Oil Mill, etc.**—Shubuta Oil & Manufacturing Co. has been incorporated, with paid-in capital of \$5,000, and will build cottonseed-oil mill and fertilizer factory. Machinery and buildings have been contracted for and work begun; S. H. Floyd, president, and W. L. Reams, vice-president-treasurer.

#### MISSOURI.

**Kansas City Sewer.**—F. C. Youmans has received contract at \$104,429.80 for construction of sewer.

**Kansas City—Street Lighting.**—Western Street Lighting Co., with capital of \$50,000, has been incorporated by David W. Hoffman, Benj. M. Sharp, Frederick Baner and others, all of Philadelphia, Pa.

**Kansas City—Mining and Manufacturing.**—Kansas Western Company has been incorporated, with capital of \$25,000, for general mining and manufacturing in Missouri, Arkansas and Oklahoma. H. C. Vrooman of Rosedale, Kan.; Walter Vrooman of Trenton, Mo.; Seth T. Farnsworth of Kansas City, Mo., are among the incorporators.

**Moberly—Electric Plant.**—J. D. Houseman of St. Louis, Mo.; J. H. Star of Centraira, Mo.; F. V. Miller of Carthage, Mo.; F. C. Jacoby of Moberly and others have incorporated Moberly Light, Heat & Fuel Co. for furnishing light, heat and fuel; nominal capital is \$2500.

**St. Louis—Rolling Mill.**—Hager Rolling Mill, burned recently, will be rebuilt at once and capacity doubled.

**St. Louis—Heating and Ventilating.**—James P. Ryan Heating & Ventilating Co. has been incorporated, with capital of \$30,000, by James D. Ryan, Wm. M. Stanton and others.

#### NORTH CAROLINA.

**Durham—Paper Box Factory.**—Durham Paper Box Co. has been incorporated, with capital of \$15,000, for manufacture of wood and paper boxes, novelties, etc., by Wm. G. Shortess, Oscar F. Adams, J. J. Ward and others.

**Greensboro—Water-works Improvement.**—Water and light commission has awarded contract for filtering plant lately reported to Jackson Filtering Co., with capacity of 1,600,000 gallons daily and provision for doubling. Commission is negotiating for water tower of 200,000 gallons that will give eighty pounds pressure at highest ground level. Contract will be placed shortly; E. M. Goolsby, clerk.

**Greensboro—Tobacco Factory.**—American Tobacco Co. (general offices, New York) has purchased building and is remodeling it for tobacco factory; heating plant, electric elevators, electric-light equipment and other improvements will be installed. W. S. Luckett is architect in charge.

**Mt. Airy—Electric-light and Water Works.**—It is probable the town would grant fran-

chise for electric-light and water works to responsible applicant. Possibly "Town Clerk" can give information.

**Mt. Airy—Tobacco Factory.**—Rucker & Witten Tobacco Co. (main office, Martinsville, Va.) is installing additional machinery in its factory, increasing annual capacity from 2,500,000 to 3,500,000 pounds.

**New Berne—Lumber Mills.**—Broadus & Ives Lumber Co. has purchased the saw and planing mills of Broadus & Ives, and will continue their operation.

**Statesville—Grain Elevator, etc.**—Statesville Flour Mills will erect grain elevator of 30,000 bushels capacity, as recently reported; also warehouse 80x100 feet. C. H. Lester prepared plans and specifications.

**Wilson—Cotton-oil Mill.**—Farmers' Oil Mill, B. T. Lane, manager, recently reported incorporated, has awarded contract for erection of a 40-ton cottonseed-oil mill.

#### SOUTH CAROLINA.

**Anderson—Cotton Mill.**—D. P. McBrayer, president Riverside Manufacturing Co., has perfected arrangements for organization of company to build cotton mill; capital will be at least \$200,000, and probably \$300,000.

**Anderson—Sewerage.**—City has awarded contract for construction of twelve miles of sewerage to George O. Tenny at \$24,002, and for piping to Montague & Co. of Chattanooga, Tenn., at \$10,250.

**Bowman—Planing Mill.**—Orangeburg (S. C.) Machine and Repair Shops has leased Bowman & Branchville Railroad, will remove its plant to Bowman and make improvements, including erection of a planing mill, etc. Address W. C. Wise, general manager, Bowman & Branchville Railroad.

**Columbia—Steam Laundry.**—Mr. Snow will establish a steam laundry to cost about \$7000. Address care of A. F. Brooker.

**Florence—Ice Factory.**—Capt. E. Mikell of Augusta, Ga., and associates will erect a \$30,000 ice plant.

**Lexington—Electric Plant, etc.**—Lexington & Columbia Railway Co. will build electric plant to operate proposed railway and furnish lights and power, and construct bridge across river. Alfred J. Fox, Julian E. Kaufman and G. T. Graham are interested. Capital stock is \$100,000.

**Piedmont—Mercantile.**—J. J. McAbee and others have incorporated Hampton Mercantile Co., with capital of \$12,000.

#### TENNESSEE.

**Memphis—Cotton-oil Mill.**—American Cotton Co., New York, has purchased twenty acres of land at Memphis, and will erect cottonseed-oil mill to cost \$250,000. David Trainor, assistant operating manager, may be addressed at Memphis.

**Nashville—Roofing and Paving.**—Nashville Roofing & Paving Co. has been incorporated, with capital of \$50,000, for general roofing and paving, by George M. Ingram, Wm. F. Leitwich, Robert L. Procter and others.

**Nashville—Timber and Mineral-land Development.**—Stearns Lumber Co., with authorized capital of \$100,000, and Stearns Coal Co., with capital of \$30,000, have been incorporated by A. L. Cogsdill, Frank Selmons, Verne M. Jones and others. Companies have acquired 25,000 acres of land in Whitley county, Kentucky, and 45,000 acres in several counties in Tennessee, and will develop the timber and mineral resources.

**Nashville—Casket Factory.**—National Casket Co. has purchased site for its new plant, as recently reported; plans are being prepared by S. E. Loring of Syracuse, N. Y., for a mill constructed building of 70,000 square feet of floor space. Contracts will be let as soon as plans and specifications are ready, and will include 150-horse-power (Corliss) engine, electric elevator, steam heating, etc., contracts for which will be let through Mr. Maxwell, manager of the Oneida (N. Y.) branch.

**Shelbyville—Saw and Planing Mill.**—G. W. Ransom is building saw and planing mill.

**Shelbyville—Mercantile.**—W. H. Hutter, R. E. Looney, J. E. Boudurant and others have incorporated Erin Mercantile Co., with capital of \$5000.

**South Pittsburg—Coal Mines.**—Campbell Coal & Coke Co., 40 North Broad street, Atlanta, Ga., has purchased Needmore Coal Co.'s mines and lands, and will develop same to a capacity of 1000 tons daily, expending about \$100,000.\*

#### TEXAS.

**Allamore—Copper Mine.**—Kelley & Fitzgerald of El Paso, Texas, are opening up the Hazel copper mine.

**Amarillo—Light and Power.**—Incorporated: Amarillo Light & Power Co., capital stock \$40,000, by E. L. Dahoney, H. B. Jones and John A. Porter.

**Bay City—Rice Mill.**—Colorado Valley Rice Milling Co. has been incorporated, with capital of \$50,000, by J. E. Platt, D. P. Moore, V. L. Le Tulle and others.

**Beaumont—Canal.**—Treadaway Canal & Rice Co., W. F. Treadaway, manager, previously reported, has awarded contract for construction of its irrigation canal to Moore Bros. of Vinton, La., at about \$115,000; canal will be twenty-eight miles in length, for watering 50,000 acres.

**Beaumont—Oil and Paint Company.**—Chartered: Bleached Asphalt Oil & Paint Co., with capital stock of \$100,000, by John Wilcox, Ivy Wilcox, B. G. Neighbors of San Marcos and others.

**Beaumont—Oil Refinery.**—Great Southern Refining Co. of Texas has been incorporated, with capital of \$250,000, to refine crude petroleum, etc., by F. J. Cleminger, W. S. Timmins and John F. Murray.

**Beaumont—Oil Wells.**—Higgins Standard Oil Co., Ltd., has been chartered, with capital stock of \$10,000,000, for developing oil properties in Louisiana and Texas, by Patillo Higgins, I. D. Polk, John H. Brooks and H. B. Short of Beaumont, J. R. Watkins of Lake Charles, La.; Jacob Keller of Houston, Texas, and others.

**Beaumont—Transportation.**—Thompson Hill Transportation Co., with capital stock of \$1,000,000, has been incorporated by John E. Thompson, Jasper Thompson of Forest City, Iowa; Francis M. Thompson of Tock Rapids, Iowa; Chas. A. Brown of Stillson, Texas, and others.

**Big Sandy—Cannery, etc.**—Big Sandy Canning & Manufacturing Co., recently reported incorporated, has plant established with capacity of 1000 three-pound cans per hour, and proposes to install machinery later on for manufacture of boxes, crates, etc.

**Bisbee—Water-works.**—Bisbee-West Mining Co. has franchise for constructing water-works.

**Brenham—Cotton Compress.**—National Compress Co. will install the Webb side-door attachment for compressing cotton; cost \$15,000.

**Crockett—Gin.**—Company has been organized, with capital of \$25,000, for installation of cotton gin with capacity of 120 bales a day. Names of those interested will be mentioned later.

**Dallas—Printing and Publishing.**—Chartered: A. T. Wilson Agency, for printing and publishing, by H. J. Evans, S. L. Harris and A. T. Wilson; capital \$10,000.

**Dallas—Electric-light and Power Company.**—Dallas Electric Light & Power Co. has been incorporated, with capital stock of \$700,000, by J. B. Adoue, C. A. Keating, A. V. Lane, T. W. Seallard and others.

**Dallas—Oil Refinery.**—Dr. J. B. Cranfill and associates will build an oil refinery of 500 barrels daily capacity, investing about \$200,000.

**Dallas—Construction.**—Chartered: J. W. Slaughter Construction Co., with capital of \$10,000, by G. W. Moore and Wendel Spence.

**Dayton—Oil Pipe Line.**—Dayton Land Co., now developing oil properties, proposes constructing pipe line to Houston, a distance of twenty-five miles. C. T. McIntosh of Houston is manager.

**Farmersville—Mining and Milling.**—Chartered: Shafter Mining & Milling Co., with capital stock of \$100,000, by W. L. Ramsey, J. E. Leeper, J. A. Hicks and others.

**Fort Worth—Cornices.**—Chartered: Attwell Cornice Co., capital stock \$10,000, by L. H. Attwell, W. C. Danner and S. B. Attwell.

**Fort Worth—Telephone System.**—Texas Automatic Telephone Construction Co. has been incorporated, with capital of \$25,000, by F. B. McElroy, H. W. Withers and H. T. Langburn.

**Fort Worth—Oil Mill.**—American Cotton Oil Co. (main offices, New York city) has purchased five acres of land near Fort Worth as site for a large cottonseed-oil mill.

**Galveston—Rice Mill.**—Seaboard Rice & Milling Co., reported recently as incorporated with capital of \$100,000, has awarded contract for its machinery, and will establish mill with capacity of 1200 barrels a day.

**Galveston—Oil-mixing Plant.**—Greater New York Home Oil Co. will soon begin construction of its proposed mixing plant, the output of which will be used for lubricating purposes only.

**Gough—Gin and Grist Mill.**—Gough Gin & Mill Co., recently incorporated, has awarded contract for installation of cotton gin and grist mill.

**Hico—Water-works.**—Town has voted \$6750 for construction of water-works. Address "Town Clerk."

**Houston—Orchard.**—Incorporated: East Texas Orchard & Garden Co., Ltd., capital



stock \$30,000, by Fred W. Mally, Sam H. Dixon, C. P. Hudson, M. M. York and Fred H. Mally.

Marlin—Drug Company.—Chartered: Rice Drug Co., with capital of \$10,000, by S. P. Rice, J. C. Sneed and A. O. Curry.

McKinney—Water-works.—It is rumored \$12,000 will be issued for construction of water-works. Address "Town Clerk."

Orange—Paper Mill.—Orange Paper Mill Co. has awarded contract to Murphy & Whitney of Lake Charles, La., for erection of two-story building 57x210 feet. Contract for engine and boiler house has not been awarded. Burt McDonald prepared plans.

Paris—Wallpaper, etc.—Incorporated: Wright Book & Wallpaper Co., capital stock \$300, by John M. Wright, James H. Hancock and Alston Gowdrey.

Ragley—Lumber Company.—Ragley Lumber Co. has been incorporated, with capital of \$200,000, to manufacture lumber, by W. G. Ragley, J. B. Wilson and M. J. Ragley.

Seguin—Electric-power Plant.—J. T. Holmes and Eugene Nofly contemplate developing water-power and erecting electric plant, transmitting about 800 horse-power.

Weatherford—Cotton Mill.—Company lately organized has been incorporated as Weatherford Cotton Mills, with W. S. Fant, president; W. D. Carter, vice-president, and C. C. Littleton, secretary, to build mill. Capital is \$50,000.

Wharton—Sugar Mills.—Wharton Sugar Co., reported incorporated last week with \$20,000 capital, is rebuilding the Camperdown Syrup Mill, to have capacity of 100,000 tons of cane per twenty-four hours; cost about \$10,000.

#### VIRGINIA.

Chase City—Mineral-water Company.—Chase City Mineral Water Co. will increase capital by \$25,000.

Graham—Tobacco Company.—Lynchburg Tobacco Works has incorporated with James Davenport of Graham, president; J. C. Nowlin of Lynchburg, Va., vice-president; Sidney Bernard of Bluefield, W. Va., secretary, and John Walters of Graham, treasurer; capital \$25,000.

Manchester—Furniture and Mattress Company.—James River Furniture & Mattress Co. has been incorporated by Israel Stern, Louis Arnheim, Milton L. Bloomberg, Melvin L. Stern and others, with capital of \$25,000; absorbs plant of James River Furniture & Mattress Co.

Martinsville—Tobacco Factory.—Rucker & Whitten Tobacco Co., reported last week as to erect new factory, does not expect to build until next year; plant will have capacity of about 10,000,000 pounds annually.

Newport News—Pottery.—E. C. Murphy of East Liverpool, Ohio, has made a proposition to J. E. B. Stuart to establish pottery in consideration of a bonus of \$25,000 and three acres of land.

Norfolk—Land Improvement.—Southern Development & Exchange Co., recently organized for improvement of real estate, will apply for charter; capital to be from \$10,000 to \$100,000. Incorporators will include I. S. D. Sauls (president) and A. T. Stevens (secretary).

Norfolk—Stove Foundry.—Board of Trade is corresponding with an Albany (N. Y.) company which proposes to establish a stove foundry in Norfolk; \$300,000 company is proposed, local investors to subscribe \$200,000 of this amount. Ten acres of land, with water and rail facilities, would be required. Endeavors will be made to locate this enterprise.

Richmond—Tobacco Factory.—Butler & Boshier (Twenty-fourth and Franklin streets) will erect additional tobacco factory; building will be 150x300 feet, six stories high.

Richmond—Drug Company.—Shockoe Drug Co. has been incorporated, with capital of \$25,000. T. N. Curd is president; W. F. Warriner, vice-president; Josiah Vaughan, secretary-treasurer.

Richmond—Iron Works.—Richmond Iron Works has incorporated, with capital of \$100,000. John Chamblin is president; George Cole Scott, vice-president; Millard F. Cox, general manager, and R. Massie Nolting, secretary-treasurer. Company continues established plant of same name.

Richmond—Trunk-strap Factory.—Lever Buckle Co., recently chartered with capital stock of \$100,000, has established a factory in Richmond for manufacture of a patent trunk strap. Nathaniel Green is president; J. S. Tisdale, secretary-treasurer.

Salem—Machine Works.—Martin Engraving Machine Co. has been incorporated, with capital of \$10,000, for manufacture of an engraving machine patented by J. H. Martin of Roanoke, Va. M. G. McClung is president; J. H. Chapman, vice-president; J. S. Persinger, secretary-treasurer.

#### WEST VIRGINIA.

Beckley—Coal Mines.—White Ash Coal Co., with capital stock of \$500,000, has been incorporated by Thomas R. Tunis of Media, Pa.; Geo. W. McFarland, John J. Eberley of Philadelphia, Pa., and Rowland G. Mitchell of Brownsburg, Va.

Berkeley Springs—Coal Mines.—Chartered: Rock Gap Coal & Mining Co., by John W. Widmeyer, Laura J. Widmeyer, T. Harris Cannon of Baltimore, Md., and A. M. Mendehall of Berkeley Springs, to develop a vein of anthracite coal; authorized capital is \$15,000.

Ceredo—Box Factory.—C. W. Kenedy Company will rebuild box factory lately burned, but has not selected location.

Ceredo—Water-works.—City is investigating construction of water-works. Address "The Mayor."

Clarksburg—Steel Mill.—Riverside Development Co. has acquired fifty acres of land near Clarksburg, and reports state the company is expected to close arrangements with a steel mill desiring location.

Clarksburg—Tinsmith Mill.—Follansbee Bros. & Co. have purchased 200 acres of land from F. J. and H. B. Mahan, and will erect large tinsmith mill.

Doyle—Coal Mines.—Jones Colliery Co. has been incorporated, with capital stock of \$500,000, by C. T. Jones, G. W. Jones of Red Star, W. Va.; J. W. St. Clair of Fayetteville, W. Va., and others.

Fairmont—Shops, Roundhouse, Apartment-house, etc.—Baltimore & Ohio Railroad Co. will shortly begin work on its proposed improvements, which include removal of shops and other buildings from Jayne, erection of coal trestle and sandhouse, apartment-house for employees, enlargements of its yards, etc., at cost of \$350,000. Contract for erection of its proposed 22-stall roundhouse has been awarded to Ferguson & Son of Newark, Ohio.

Montgomery—Mining.—Chartered: Wake Forest Mining Co., capital stock \$25,000, by J. C. Grymes and J. Henderson of Montgomery, W. Va.; T. A. Bantlam, Crescent, W. Va.; J. J. Ketter and Alma Kelly of Harwood, W. Va.

Moore—Lumber Mill.—Samuel Rosendorf of New York has sold 4200 acres of land in Randolph county, West Virginia, to Pittsburg (Pa.) parties, who will erect large lumber mill and construct railroad for developing the property.

Morgantown—Paving and Sewers.—City has voted \$30,000 in bonds for sewer and paving improvements. Address "The Mayor."

Parkersburg—Oil and Gas Wells.—Steer Creek Oil & Gas Co. has been incorporated, with capital stock of \$100,000, by C. T. Caldwell, John T. Harris, V. B. Archer and others.

Pratt—Lumber Mills.—J. W. Mahan Lumber Co., capital stock \$25,000, has been incorporated by John Russell and Charles Russell of Ashland, Ky.; K. G. W. Davis, Catlettsburg, Ky.; J. H. Coleman, Williamson, W. Va.; John W. Mahan, Catlettsburg, Ky., to operate mills.

Shinnston—Coal Mines.—James Carter of Shinnston, A. L. Bradley of Clarksburg, W. Va.; J. P. Alkire and E. E. Kearns of Evans, W. Va., and H. S. Falconer of Chieftain, W. Va., have incorporated Carter & Alkire Coal & Investment Co. for developing mines, etc. Capital stock is \$100,000.

Sistersville—Mercantile.—Chartered: M. A. Sybert Grocery Co., with capital of \$10,000, by M. A. Sybert and others.

Sistersville—Oil Wells.—Bruner Oil Co. has been incorporated for development of oil wells, by Wm. F. Stewart of Philadelphia, Pa.; Thomas F. Birmingham of Sistersville and H. Clark Hazlett of Wheeling; capital \$25,000.

St. Mary's—Oil Wells.—Chartered: Rouse Run Oil Co., with capital of \$25,000, by David McKane, E. J. Young of Washington, Pa.; James M. P. Reed of Swissvale, Pa., and others.

West Virginia—To Purchase Coal Fields.—Z. T. Vinson of Huntington, W. Va., and Albert F. Holden of Cleveland, Ohio, are interested in the United States Oil Co., reported at length in these columns in issue of May 29. They can be addressed.

Wheeling—Mining.—Chartered: Upstill Coal Mining Co. has been incorporated, with capital stock of \$1,000,000, by E. T. Hiehman, W. H. Koch, Howard Hazlett and others.

#### OKLAHOMA TERRITORY.

Guthrie—Townsite Improvements.—Frank Greer, O. P. Cooper, Robert Ramsey, Geo. Willis, C. C. Horner and others have incorporated Meridian Townsite & Right of Way Co. to take charge of right of way for Mis-

souri, Kansas & Texas Railroad extension, and to plat townsites. Capital stock is \$50,000.

Hobart—Construction.—Chartered: Washita Valley Construction Co., with capital stock of \$1,250,000, has been incorporated by D. S. Dill, D. S. Woolfingher and others.

Lawton—Gas and Oil Wells.—Incorporated: Highland Mary Oil, Gas, Mining & Improvement Co., with \$1,000,000 capital stock, by Frank Eckert and Dr. George R. Conover of Indianapolis, Ind.; Robert Conover, A. G. Hambleton and Samuel I. McElroy of Lawton and others.

Lexington—Water-works.—J. M. Carter of Dallas, Texas, has contract for construction of proposed water-works.

Newark—Stone and Construction Company. Newark Stone & Construction Co. has been incorporated, with capital of \$10,000, by M. Haynes, W. D. Lewis, J. C. Armstrong and others.

O'Keen—Flour Mill, etc.—Incorporated: Oklahoma Mill & Elevator Co., with capital stock of \$50,000, by E. A. Stevens, G. W. Stevens, W. S. Power, R. Y. Power, J. A. Robert and C. L. Power.

Oklahoma City—Land Company.—Winthrop Land Co. has been incorporated, with capital of \$30,000, by J. H. Winthrop of Winterset, Iowa; John Treadgill, M. L. and Guy E. Blackwell.

Shawnee—Railroad Shops.—Chicago, Rock Island & Pacific Railway has purchased eighty acres of land adjacent to present shops for extending same and making other improvements. A. J. Hitt, Chicago, Ill., is general manager.

Waurika—Telephone Company.—Farmers & Merchants' Telephone Co. has been incorporated, with capital of \$10,000, by J. M. Bellamy, A. N. Campbell and C. K. Bellamy of Lawton.

#### BURNED.

Alvarado, Texas.—J. P. Mims' cotton gin.

Eagle Lake, Texas.—Eagle Lake Rice & Irrigation Co.'s power-house.

Mineral, Va.—Power plant at pyrites mines of Capt. Boyd M. Smith; estimated loss \$15,000.

#### BUILDING NOTES.

Asheville, N. C.—Church.—Dr. Stuart Dodge of New York, president of Southern Presbyterian Home Mission Board, will build a \$25,000 church.

Atlanta, Ga.—College.—Atlanta Dental College, Dr. H. R. Jewett, dean, will erect five-story building to cost \$30,000. Plans have not been prepared.

Atlanta, Ga.—Theater.—Plans for converting armory into a modern theater will, it is said, be carried out. For particulars address J. B. Frost.

Austin, Texas—School.—Regents of Girls' Industrial School will open bids at Denton, Texas, July 1 for erection of three-story brick building to cost \$45,000.

Baltimore, Md.—School.—C. Sheehan & Sons have contract at about \$43,000 for erection of school building, and Crook, Horner & Co. have contract for heating building at about \$8000.

Barstow, Texas—Hotel.—Incorporated: Margueretta Hotel Co., capital stock \$10,000, by George C. Barstow, Harold C. Barstow, Herbert S. Barstow and Pat Carson.

Birmingham, Ala.—Hospital.—Allen J. Krebs has contract for erecting the Hillman Hospital.

Birmingham, Ala.—College.—Tothero & Smith have contract for erecting Birmingham Medical College; building will be four stories, of brick and stone, and cost about \$30,000.

Blaine, W. Va.—Hotel.—George W. Kitzmiller of Piedmont, W. Va., will build frame hotel of thirty rooms.

Charlotte, N. C.—Dwellings.—Dr. C. G. McManaway is having plans prepared (as lately reported) for erection of two dwellings by Architect McMichael. Contracts for materials, etc., have not been awarded.

Cocoahontas, Ark.—School.—Town will erect a brick school building. Address "Town Clerk."

Columbia, S. C.—Bank Building.—Carolina National Bank will accept plans by W. B. Smith Whaley & Co. for proposed 12-story office building 52x152 feet, to cost about \$150,000. W. A. Clark is president.

Columbia, S. C.—Church.—Bids will be opened June 4 for construction of Second Presbyterian Church building after plans on file with J. H. Sams, architect, and with D. W. Robinson, 1217 Washington street.

Dallas, Texas—Dwellings.—M. A. Shumard will erect five dwellings to cost \$15,000.

Decatur, Ala.—Hotel.—Col. C. C. Harris,

John L. Brock, John W. Night and others are organizing \$25,000 company for erection of hotel, for which Herbert Cowell of Huntsville, Ala., is preparing plans.

Decatur, Ala.—Stores Building.—Col. C. C. Harris is erecting block of six stores.

Decatur, Ala.—Residence.—Herbert Cowell of Huntsville, Ala., is preparing plans for large residence at Decatur.

Decatur, Ala.—Hotel.—C. C. Harris, John L. Brock, John W. Night and others will organize company to build \$25,000 hotel.

Dublin, Ga.—Depot.—Macon, Dublin & Savannah Railroad will build passenger depot; plans being prepared by D. B. Dunn, chief engineer, Macon, Ga.

Durham, N. C.—Buildings.—W. H. McCabe, chairman, will open bids June 12 for construction of municipal building. Certified check for \$500 must accompany each bid; \$15,000 bond required and usual rights reserved. Plans and specifications on file at office of city clerk and at office of Hook & Sawyer, architects, Charlotte, N. C.

Elkins, W. Va.—Business Building.—Exchange Building Co. will erect four-story business building of stone and brick, 50x150 feet.

El Paso, Texas—School.—City will erect \$10,000 school building. Bids for erection will be opened June 10. Address "The Mayor."

Fairmont, W. Va.—Office Building.—Ellisworth Dean of Pittsburgh, Pa., has completed plans for Fairmont Trust Co.'s proposed \$50,000 office building.

Gaffney, S. C.—City Hall.—Plans of Wheeler & Runge of Charlotte, N. C., have been accepted for proposed City Hall.

Hickory, N. C.—Store Building.—McCoy Moritz will erect a store building.

Hot Springs, Ark.—Hotel.—Charles Orr will build hotel of fifty rooms, with metal ceiling, baths, etc., at a cost of \$50,000.

Huntsville, Ala.—Residence.—Contractor C. F. Bost has contract for brick work on the proposed \$15,000 dwelling of W. R. Van Valkenburg.

Huntsville, Ala.—Dwellings.—Minchener & Henderson will erect block of operatives' dwellings.

Iron City, Ala.—Dwellings.—Muscadine Mining Co. has awarded contract to T. O. Randall of Talladega, Ala., for erection of thirteen operatives' dwellings.

Johnson City, Tenn.—Dwellings.—Curtis Bros. have contracts for erecting dwellings for De Long Rice, J. B. Worley and G. F. Artz.

Kansas City, Mo.—Store Building.—Richards & Conover Hardware Co. will erect brick store building 80x175 feet, to cost \$100,000. Shepard & Farrar furnish plans.

Louisville, Ky.—Residence.—J. J. Gaffney has made plans for residence for Mrs. E. Kohler.

Louisville, Ky.—Residence.—D. X. Murphy & Bro. have made plans for residence for Oscar Fenley.

Louisville, Ky.—Factory and Warehouse.—McDonald & Shebley have made plans for new factory building and warehouse for Louisville Lead and Color Works; cost \$25,000.

Madisonville, Ky.—Bank Building.—Kentucky Bank & Trust Co. will erect bank and office building.

Memphis, Tenn.—Apartment-house.—Sam Foltz will build three-story apartment-house, to cost \$7800.

Memphis, Tenn.—Storage Warehouses.—G. W. Macrae, E. B. McHenry, J. M. Hill, Percy H. Patton and others have incorporated River & Rail Storage Co., with capital stock of \$100,000, to erect storage warehouses.

Montgomery, Ala.—Warehouse.—Hobbie & Teague have awarded contract to J. B. Worthington for erection of a two-story brick warehouse.

Morristown, Tenn.—Jail.—Hamblen county will open bids July 5 for erection of two-story fireproof jail, to cost about \$10,000. Address E. Gilbert, county clerk.

Newnan, Ga.—Store Building.—Butt & Morris of Atlanta, Ga., are preparing plans for erection of two-story brick store building, lately reported, for Atkinson Bros. Contracts for erection not let.

New Orleans, La.—Wharf Construction.—Hugh McCloskey, president of port commissioners, 337 Carondelet street, will open bids June 10 for labor and materials necessary for construction of wharf, after plans and specifications at office of Coleman & Malochie, engineers, 319 Carondelet street. Blank forms of proposals are ready.

Newport News, Va.—Church.—Newport News Baptist Church is calling for bids for the erection of a building, for which \$60,000 is available.

Norfolk, Va.—Building.—Nottingham & Wrenn Company will erect two-story building. H. I. Dwyer is the architect. Contract for erection not awarded yet.

Oklahoma City, O. T.—Store Building.—Colcord & Ziegler will erect four-story store building 50x140 feet.

Opelika, Ala.—School.—School board has decided to erect another \$10,000 school building. Address "The Secretary."

Orange, Texas.—Opera-house.—Burt McDonald has completed plans for opera-house 70x200 feet, to cost \$50,000.

Paris, Ky.—Courthouse.—Frank P. Milburn of Columbia, S. C., will prepare plans and specifications for Bourbon county's proposed \$150,000 courthouse.

Palaski, Va.—Store Building.—H. W. Steger will erect building 75x120 feet, fireproof construction.

Richmond, Va.—School.—Board of education is asking bids until June 4 on erection of a school, for which \$7500 is available; plans by C. W. Jones.

Richmond, Va.—Warehouse.—Pelouze Paper & Type Co. has awarded contract to J. L. Cheatwood for erection of three-story warehouse 39x100 feet.

Savannah, Ga.—Bank Building.—Citizens' Bank will erect five-story bank building of fireproof construction, plans to be prepared by G. L. Norman of Atlanta, Ga.

St. Augustine, Fla.—Hospital.—W. H. Mitchell has contract for building brick addition to Alicia Hospital.

St. Mary's City, Md.—Building.—Jos. H. Key, secretary trustees St. Mary's Female Seminary, Leonardtown, Md., will receive sealed proposals at Leonardtown until June 17 and at St. Mary's until June 18 for erection of and heating a three-story brick building 75x30 feet at St. Mary's City. Specifications can be had and plans seen at Leonardtown, at St. Mary's City, at Union Trust Co. of Maryland, with George Blakistone, president, Fayette and Charles streets, Baltimore; also at 422 Ninth street N. W., Washington, D. C. Bond required and usual rights reserved.

St. Louis, Mo.—Apartment-house.—Apartment Building Co. has been incorporated, with capital of \$50,000, for erecting apartment-houses and hotels, contract for the first having been let to Lange & Bergstrom; it will be three stories, 81x212 feet; plans by J. Stafford White.

Tallahassee, Fla.—Residence.—Frank P. Milburn of Columbia, S. C., has prepared plans for \$5500 residence for T. M. Tinsley.

Tampa, Fla.—Courthouse.—James Knox Taylor, supervising architect, Treasury Department, Washington, D. C., will open bids July 2 for construction (except heating apparatus, electric wiring and conduits) of United States courthouse, postoffice and customhouse at Tampa, in accordance with drawings and specifications, copies of which may be had at above office or office of postmaster at Tampa.

Warren, Ark.—Warehouse.—Thompson Carriage Co. will erect warehouse 50x120 feet.

## RAILROAD CONSTRUCTION.

### Railways.

Ardmore, I. T.—The St. Louis & San Francisco Railroad is reported to be buying rights of way to Coalgate. B. L. Winchell is general manager; office at St. Louis.

Austin, Texas.—Construction of a railway from Alice to Brownsville is being discussed. John H. Brooks of Austin and others are interested.

Baltimore, Md.—It is announced that the contract for grading the Washington, Baltimore & Annapolis Railroad, an electric line, has been awarded to Rogers & Walker. Jas. Christy, Jr., is general manager; office at Washington, D. C.

Birmingham, Ala.—It is reported that the Birmingham Belt Railroad is surveying a line from Birmingham to Atlanta. T. W. Coolidge of New York is said to be interested. George H. Clark is general manager, with office at Birmingham.

Charleston, W. Va.—The Ronceverte, Lewisburg & Western Railway Co. has been chartered by D. C. T. Davis, Jr., Alexander F. Matthews, W. E. Nelson, John A. Preston and W. L. Van Sickles, all of Lewisburg, and W. G. Matthews of Charleston.

Cleburne, Texas.—The line of the Dallas, Cleburne & Southwestern Railroad is being located through Cleburne. W. D. Myers obtained the franchise.

Columbus, Ga.—President W. A. Hawkins of the Columbus, Eufrasia & Gulf Railway Co. writes to the Manufacturers' Record that the extension to Birmingham has been decided upon, and that the line will probably

go via Tuskegee and Rockford; office at Columbus.

Cumberland, Md.—The Cumberland & Pennsylvania Railroad is considering plans. It is stated, to build an electric railway between Frostburg and Cumberland. L. M. Hamilton is general manager; office at Cumberland.

Danville, Ky.—G. E. Wiseman, Jr., and other business men have begun a movement to have a railroad built from Danville to connect with the Louisville & Nashville at Junction City, five miles distant.

Enid, O. T.—The Enid, Denver & Gulf Railroad is to be completed in time to haul the grain crop this year. U. G. Croxton and others are interested.

High Point, N. C.—Philadelphia capitalists are reported to be planning an electric railway system from High Point to Greensboro, Winston-Salem, Thomasville, Archdale, Oakridge and Kernersville, a total distance of about fifty miles.

Hot Springs, Ark.—The survey has been completed for an electric railway from Hot Springs to the Washita river, five miles. George M. French is chief engineer.

Houston, Texas.—The Southern Pacific Railroad has applied to the city council for permission to build four additional tracks on Montgomery avenue. W. G. Van Vleet is vice-president; office at Houston.

Huntington, W. Va.—Mr. J. L. Caldwell writes to the Manufacturers' Record that the Guyandotte Valley Railway will be extended from a point called Midkiff, on the Guyandotte river, about forty miles south of Charleston, at or near Logan Courthouse. Carpenter, Wright & Co. of Richmond and Covington, their present address being Charleston, have the contract.

Hyde, La.—The East Union Lumber Co., it is understood, proposes building a railroad to Greensburg. J. B. Nalty is president; office at Hyde.

Jackson, Miss.—The Gulf & Ship Island Railroad will, it is understood, make extensions and improvements after issuing several millions of dollars of bonds. Joseph A. Jones is vice-president; office at Gulfport, Miss.

Jefferson City, Mo.—The Moberly (Mo.) Railroad Co. has been chartered to build an electric road from Huntsville to Moberly and Perry. J. H. Starr of Centralia, J. D. Houseman of St. Louis and others are interested.

Jonesboro, Ark.—It is reported from Blythesville that work is to begin on the extension of the Jonesboro, Lake City & Eastern Railway. A. J. Kerfoot is general manager; office at Jonesboro.

Kansas City, Mo.—Another report concerning a Choctaw extension to St. Louis is that the Rock Island system, which purchased the St. Louis, Kansas City & Colorado line, as well as the Choctaw, Oklahoma & Gulf, will connect them via Fort Smith, Ark. H. A. Parker is vice-president in charge of operating on the Rock Island system; office at Chicago.

Knoxville, Tenn.—It is reported that the Illinois Central Railroad will reach Knoxville over the Tennessee Central, which, it is stated, is surveying a line into Knoxville. J. T. Harahan is second vice-president of the Illinois Central in charge of operating; office at Chicago. Jere Baxter is president of the Tennessee Central; office at Nashville.

Knoxville, Tenn.—W. A. Park has the contract for two miles of rock work on the Knoxville, Lafollette & Jellico Railroad. His camp is on Davis and Hickory creeks.

Lake Charles, La.—It is reported that the St. Louis, Watkins & Gulf Railway will build an extension. A. Thomson is vice-president; office at Lake Charles.

Lexington, S. C.—Application has been made for a charter for the Lexington & Columbia Railway Co. to build an electric railroad between the two cities. Col. G. T. Graham, Alfred J. Fox and Julian E. Kaufmann of Lexington are the incorporators. The line will be about twelve miles long.

Lufkin, Texas.—Mr. E. A. Frost, general manager of the Texas & Louisiana Railroad Co., writes the Manufacturers' Record that its line will soon be extended, but the route has not yet been definitely decided.

Memphis, Tenn.—It is understood that the St. Louis & San Francisco will build an extension from the Memphis, Kansas City & Birmingham to Nashville. B. L. Winchell is general manager; office at St. Louis.

Nashville, Tenn.—Surveys and estimates for the extension of the Tennessee Central from Clarksville to Gracey, Ky., have been completed. Col. Jere Baxter is president; office at Nashville.

Newport News, Va.—Walter B. Livezey of Newport News has applied for a franchise for the Newport News & Elizabeth City Railway & Electric Co. to lay tracks.

Norfolk, Va.—It is reported that promoters are planning an electric railway from Norfolk to Petersburg to connect with a line from that city to Richmond.

Oklahoma City, O. T.—The Missouri, Kansas & Texas Railway has, it is reported, completed a deal for the construction of a railway from Oklahoma City to Coalgate, I. T., through the purchase of a charter held by local capitalists, and including the right of way through Oklahoma county. The St. Louis & San Francisco will also, it is stated, build to the same place. A. A. Allen is general manager of the Missouri, Kansas & Texas, and B. L. Winchell is general manager of the Frisco; offices at St. Louis.

Orangeburg, S. C.—The Orangeburg Machine and Gin Repair Shops has leased the Bowman & Branchville Railroad, and will improve and operate the line; office at Bowman, S. C.

Plant City, Fla.—The Warnell Mill Co. is building a railroad from Plant City to Arcadia, seventy-five miles through timber land.

Raleigh, N. C.—Mr. John A. Mills, president of the Raleigh & Cape Fear Railroad, writes the Manufacturers' Record that the company has located a line for an extension from Sippahaw to Lillington, about fifteen miles.

St. Louis, Mo.—The St. Louis, Hillsboro & Southern Railway Co. has accepted the franchise to build a railroad from St. Louis to Hillsboro. Thomas F. Sneed is president; office at St. Louis.

St. Louis, Mo.—A compact has been made, it is stated, between the Chicago, Burlington & Quincy and the Chicago, Rock Island & Pacific roads for terminals, including the Wiggins Ferry property and also world-fair terminals. F. A. Delano is general manager of the Burlington and H. A. Parker is vice-president in charge of operating on the Rock Island; offices of both at Chicago.

Thibodaux, La.—Mr. C. R. Young, general manager New Orleans & Southwestern Railroad Co., writes to the Manufacturers' Record that the contract for building the roadbed has been awarded to Bryan, Haynes & Turner of Memphis, Tenn. The road will be seventy-seven miles long from Hahnville, on the Mississippi river, to Montague, near the Gulf.

Trenton, Tenn.—A movement is under way to build a railroad on the old Tennessee Central roadbed to Milan to connect with the Illinois Central and the Louisville & Nashville. R. Z. Taylor of Trenton owns the right of way.

Tulsa, I. T.—The Missouri, Kansas & Texas Railway will, it is reported, build to Tulsa. A. A. Allen is general manager; office at St. Louis.

Valdosta, Ga.—The sale of the Atlantic, Valdosta & Western Railway to the Southern will not, it is stated, stop the work on the projected extension to Albany. The survey is still going on. E. C. Long is vice-president; office at Jacksonville, Fla.

Wichita Falls, Texas.—Wichita Valley Railroad is to be extended from Seymour to Stamford, about sixty miles. Col. Morgan Jones is president and manager at Wichita Falls.

### Street Railways.

Atlanta, Ga.—The city council has adopted an ordinance requiring the Georgia Railway & Electric Co. to widen the West End culvert to admit two tracks.

Austin, Texas.—The Austin Electric Railway Co. has been incorporated by F. P. Watriss of New York, T. B. Cochran and others of Austin, to reorganize the Austin Rapid Transit Line. It is reported that improvements will be made.

Brunswick, Ga.—H. C. Fash of New York, who has obtained a franchise for a street railway in Brunswick, has returned here, and is quoted as saying that work will begin immediately, and cars will be running by January 1.

Chattanooga, Tenn.—An ordinance has been introduced into the city council to grant the Rapid Transit Company a franchise on Market street between Eighth and Ninth streets. S. W. Divine is vice-president; office at Chattanooga.

Columbia, S. C.—The Brookland Electric Railroad Co. has, it is reported, awarded the contract to build its line in Brookland across the river from Columbia.

Fallas, Texas.—The city council has finally passed the franchise for the projected Metropolitan Electric Street Railway system, in which A. K. Bonta and others are interested. The United Electric Securities Co. of Boston is said to be behind the plan.

Fairmont, W. Va.—The Wagner-Palmros Machine Works has been awarded a contract by the Fairmont & Clarksburg Street Railway Co. for all the overhead work on its extension from Fairmont to Monongah.

Greensboro, N. C.—A deal has been closed to consolidate the gas, electric-light, street-railway and power interests in Greensboro. The Greensboro Electric Co. has elected new officers and directors, as follows: Dr. F. A. Perrine of New York, president; F. R. Williamson of Flemington, N. J., vice-president; V. J. Jerome Otis of New York, secretary and treasurer; E. P. Wharton, Dr. W. M. Gamewell of Pittsfield, Mass., and Sterling Birmingham of New York. A seventh director will be chosen later.

Natchez, Miss.—The Natchez Street Railway & Power Co. has, it is reported, sold a controlling interest in the railway to the New Orleans Trust Co. Extensions are proposed.

Rome, Ga.—The City Electric Railroad Co. of Rome is considering plans to extend its lines from Mobley Park to Lindale.

St. Louis, Mo.—John H. Blessing, president of the St. Louis, Clayton & St. Charles Railway Co., has applied for an electric-railroad franchise in St. Louis county.

Wheeling, W. Va.—The Wheeling Traction Co. has, it is reported, prepared plans for a connection sixteen miles long to Steubenville. T. H. Conderman of Philadelphia, Pa., is president.

Wilmington, N. C.—The Consolidated Railways, Light & Power Co. has begun the conversion of the Wilmington Seacoast Railroad into an electric line. A. B. Skelding is general manager.

## Machinery, Proposals and Supplies Wanted.

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The MANUFACTURERS' RECORD has received during the week the following particulars as to machinery that is wanted.

Boiler and Engine.—Petersburg Iron Works Co., Petersburg, Va., wants delivered prices on one 5x10x10 cross-compound throttling engine to make 200 R. P. M. with 125 pounds steam, and on one water-tube marine boiler of suitable size for this engine.

Brick Machinery.—W. D. Haas, president Bunkle (La.) Brick Works, will buy machinery for 30,000 capacity daily.

Bridge.—Plans and specifications accompanying sealed bids for erection and completion of a highway bridge to span Cross bayou will be received by N. B. Murff, comptroller, Shreveport, La., until June 5; span 200 feet, to be of iron or steel in one span, or two spans of 150 feet each, with two approaches sixty and seventy feet, respectively; roadway between trusses twenty feet, footway on outside of trusses five feet; substructure stone, concrete or cylinder piers. Certified check for \$1000 must accompany each bid. Usual rights reserved.

Bridges.—C. B. Bryant, special commissioner, Martinsville, Va., will open bids June 11 for construction of two iron bridges with wood approaches, one to consist of two spans of eighty feet each, resting on stone piers or cylinders filled with cement, 12-foot roadway twenty-one feet above the water at normal flow, with seventy feet on north and forty feet on south of wood approaches, having a 5 per cent. grade; the other to consist of one span seventy feet long, resting on cylinders filled with cement, 12-foot roadway twenty feet above water at normal flow, with 120 feet on west and forty-five feet east of wood approaches, having a 5 per cent. grade. Work and material must conform to specifications submitted by each contractor.

Canning Equipment.—J. R. Darwin of Circle Canning Co., Circle, Tenn., wants to purchase solder irons and water tanks.

Canning Equipment.—Penniman Bros. & Co., Box 702, Asheville, N. C., want to correspond with manufacturers of canning machinery.

Casket Factory.—See item in industrial list under Nashville, Tenn.

Chemical Products, etc.—R. Lasserre, Rue de la Gare, Bordeaux, France, is prepared to correspond with American manufacturers of sulphate of copper, general chemical products, coffees, cocas, etc.

Dry-kiln.—Tuscaloosa Lumber & Manufacturing Co., Tuscaloosa, Ala., wants dry-kiln, 15,000 to 20,000 feet capacity; second-hand preferred.



**Electric-light Plant.**—City of Norman, O. T., will open bids June 10 for franchise for electric-light plant; population 3500. Address R. Mathis, city clerk.

**Electric-light Plant.**—S. W. Yarbrough, Monroeville, Ala., wants estimate on dynamo to supply fifty or seventy-five incandescent lamps and about twenty 12-inch fans.

**Filter.**—M. H. Crump, Bowling Green, Ky., wants information regarding cost, etc., of filter with capacity of 1,500,000 gallons per day.

**Fire Engines.**—S. C. Bellamy, Enfield, N. C., wants to correspond with manufacturers of fire engines run by gas engine or a portable gas engine that will run a fire pump attached.

**Flour Mill.**—A. R. Garner, Timmons ville, S. C., wants a small roller flour mill; second-hand will do.

**Flour Mill.**—Devall's Bluff (Ark.) Gin & Milling Co. will buy machinery for flour mill. Address J. M. Richardson, president.

**Furniture.**—Star Theater Co., A. N. Wood, treasurer, Gaffney, S. C., is ready to contract for seats.

**Gas Engine.**—See "Fire Engine."

**Glass Works.**—Houston Glass Works, 916 Texas avenue, Houston, Texas, wants bids on flint glass pot furnace, ten covered pots with capacity of 1200 pounds of glass each, also one five-ton glass melting continuous tank furnace.

**Hardware.**—Frank Wright, Cave Spring, Ga., wants hardware needed in manufacturing fly screens.

**Hardware Manufacturers.**—Frank Wright, Cave Springs, Ga., wants to correspond with manufacturers of hardware for door and window fly-screens.

**Holisting Equipment.**—M. M. Blatchley, Marlinton, W. Va., wants to know how much power it would require to haul 2000 pounds up an incline of 30 degrees at the rate of 200 to 300 feet per minute.

**Ice Plant.**—S. W. Yarbrough, Monroeville, Ala., wants estimates on small ice plant.

**Ironworking Machinery.**—See "Woodworking Machinery."

**Lumber Kiln.**—See "Dry-kiln."

**Mattin Machinery.**—A. J. Strickland, Valdosta, Ga., is in the market for machinery for manufacture of straw and grass matting.

**Metal Industry.**—J. Cincent, Rue Chanzy 20, Charleville, Ardennes, France, wants full information on rough castings for foundries, coal, coke and other crude products for the metal industry.

**Metal Roofing.**—George M. Brinson, president Stillmore Air Line Railway, Stillmore, Ga., wants for railroad shops prices, weights, time of shipment, freights and other information as to 700 painted corrugated sheets twelve feet long and 500 sheets eleven feet long, and 200 lineal feet ridge roll for same.

**Mining Equipment.**—Campbell Coal & Coke Co., 40 North Broad street, Atlanta, Ga., will need 12 and 30-pound steel rails, complete screening plant and 100 mining cars, prompt delivery.

**Organ.**—Methodist church of Newnan, Ga., is in the market for a grand organ. Address Mrs. T. M. Goodrum, treasurer.

**Paint Machinery.**—Spirittine Chemical Co., Wilmington, N. C., is in the market for complete equipment for manufacture of paint.

**Paper Cutter, etc.**—Florida Paper Co., Box 154, Pensacola, Fla., wants to buy 64 or 66-inch paper cutter, with or without reels and slitter, also trimming knife 30 or 40 inches wide.

**Phones and Telephone Supplies.**—Frank E. Beeman, secretary B. M. & R. Telephone Co., Wellston, O. T., wants prices on telephone supplies, including automatic switchboard system.

**Pump.**—D. W. Alderman & Sons' Co., Alcolu, S. C., is in the market for a Worthington second-hand duplex pump, with about three to three-and-one-half-inch suction.

**Railway Equipment.**—W. T. Johnson Co., Washington, Ga., wants information regarding a street car made to run with gasoline for standard track fifty-seven inches from center of iron to center of iron, with capacity for carrying fifteen to twenty passengers.

**Sewer Pipe, etc.**—Bids will be opened June 9 for sewer pipe and cement of quality and quantity set forth in plans and specifications on file with J. M. Bandy, city engineer, Greensboro, N. C.

**Sewer Work.**—Sewerage and water board, 602 Carondelet street, New Orleans, La., will open bids August 12 for construction of about ninety-eight miles of sewerage, 1150 man-holes, 530 flush tanks and appurtenances; \$15,000 check will be required for contract. Plans and specifications may be obtained

from above, or after June 20 at office of consulting engineers, Hering & Fuller, 170 Broadway, New York. Same board will also open bids August 12 for furnishing and erecting engines, centrifugal pumping machinery, boilers, dynamos, electric generators, etc.; plans and specifications also as above-mentioned.

**Steam-heating Supplies.**—F. C. Damm, Guthrie, O. T., is in need of a large quantity of steam-heating supplies.

**Textile Machinery.**—John H. Barnes, Marietta, Ga., wants to correspond with manufacturers of machinery for weaving finishing and feather braids, tapes, edgings, etc.

**Wagon-works Equipment.**—See "Woodworking Machinery."

**Watchman's Clock.**—Rock Hill Buggy Co., Rock Hill, S. C., wants to buy clock for keeping time of employees.

**Water Tanks.**—See "Canning Equipment."

**Water-works.**—R. Lundy, city clerk, Carthage, Mo., will open bids June 23 for construction of water-works. Most liberal and best contract offered will be accepted and franchise granted, subject to ratification by vote.

**Woodworking Machinery.**—W. A. Carver, Turlington, N. C., wants to buy second-hand lathe mill and boiler combined.

**Woodworking Machinery.**—R. H. Dowmann, Rooms 501, 502 and 504 Hennen Building, New Orleans, La., is in the market for complete outfit of planing machinery.

**Woodworking Machinery.**—Central Manufacturing Co., Chattanooga, Tenn., is in the market for endless bed double surfacer, band resaw about 48-inch wheels, four-side matcher about 6x14 inches, and air compressor about ten inches.

**Woodworking Machinery.**—E. O. Bessee, president, Read House, Chattanooga, Tenn., is in the market for machinery (iron and wood) for manufacture of dump and garbage (heavy) wagons, also for the manufacture of heavy wheels complete.

## TRADE NOTES.

**Stamp-Mill Shoes.**—Arthur Koppel, 66-68 Broad street, New York, manufactures steel shoes for stamp mills. Because shoes wear very quickly unless of the best material and workmanship, profits in a large plant may be lessened considerably by the use of a poor shoe. Arthur Koppel is the maker of forged steel shoes and dies, also railway materials for mines. He carries a heavy stock of these materials always on hand and ready for immediate shipment. The reputation of these goods attests their merit.

**Stanley Exhibit, Cincinnati.**—At the recent convention of the National Electric-Light Association at Cincinnati the display of the Stanley Electric Manufacturing Co. of Pittsfield, Mass., attracted general attention. The exhibit consisted of photos and maps of the great transmission lines of California, photos of the coils and cores of a 50-light S. K. C. oil transformer, and a photo of Lord Kelvin. Stanley literature was distributed freely. Mr. Bergenthal, Mr. Bibber and Mr. Lillibridge advertising managers, represented the Stanley Company.

**Complete Combustion of Coal Gases.**—Dr. J. B. Harris, Nashville, Tenn., is perfecting a device by which he claims to be able to consume all gases and smoke from coal combustion in furnaces. He started six years ago to perfect an arrangement for alleviating the smoke nuisance. He now claims his invention will burn all smoke and gas from the furnace and save 50 per cent. on the coal bill. There are people all over the United States who are looking for this, and who will rise up to call Dr. Harris blessed if his invention proves successful.

**Abuses in Sale of Wire.**—Quantities of wire are sold annually under the name "galvanized" which have no just claim to such a title. The John A. Roebling's Sons Co., Trenton, N. J., maker of a very fine grade of wire, is at this time sending out notice that it will in future seal all its product with a special seal bearing name and grade of the wire. This, it is hoped, will check the "just-as-good" methods of unscrupulous dealers. The Roebling Company claims that tests of its wire in use by Western Union and Postal Telegraph gave 97 and 98 per cent. of the conductivity of pure copper.

**Orders for Crocker-Wheeler.**—Recent orders booked by Crocker-Wheeler Co., Amper, N. J., were almost entirely the result of satisfaction with previous sales on the part of the firms ordering. That speaks well for Crocker-Wheeler. This firm has been so rushed with orders for the past twelve months that additional floor space of 60,000 square feet has been added to the already

great plant in order to facilitate the completion of the work on hand. The orders referred to went to all parts of the country, the generators ranging in capacity from 30 to 250 kilowatts. There were also a number of motors on the list.

**Pure Water.**—Nothing is so easily contaminated as water. For cities depending on their water supplies from rivers, which, in turn, have received the sewerage of the next city above, the very best system of filtration is none too good. From the amount of its business the New York Continental Jewell Filtration Co., 15 Broad street, New York, appears to have been wonderfully successful. It is now erecting large filter plants in New York, Pennsylvania, New Jersey and Rhode Island—the last to have a capacity of 2,500,000 gallons in twenty-four hours. It is also doing an extensive business in the line of water softening, the saving effected for boilers, city water bills and repair bills soon paying, it is said, for the cost of the apparatus.

**Sale of Mineral Land.**—The disastrous boom which swept Virginia some years ago dotted the State with partially worked mines and improvements. A number of these plants have been idle through lack of funds, and may be frequently be had at low prices. When lawsuits over them have further reduced the owners the prices are apt to be still lower. An opportunity to buy cheaply such a tract of valuable land now presents itself. On June 20, in Staunton, Va., some twenty-eight square miles of valuable mineral lands in and around the celebrated Goshen Pass will be offered at auction. The fine water available and rich ore for basic steel will make this property very valuable. Ten per cent. down and the rest in four annual payments are the terms of sale. Address for further information Ranson & Ranson, attorneys, Staunton, Va.

**Westinghouse Motors.**—Motors that work successfully in an atmosphere surcharged with sulphur dust without occasionally burning out are good motors. The Boston & Montana Consolidated Copper & Silver Mining Co. experienced the greatest difficulty with this burning out in its smelters and refiners at Great Falls, Mont. Until it installed Westinghouse machines trouble was almost continuous. This company states that the recent installation of eleven 15-horse-power and three 40-horse-power Westinghouse 500-volt, shunt-wound, direct-current motors has given the same satisfaction as the earlier installation of motors and generators made four years ago. This mining company also states that Westinghouse commutators are the only ones in its use sufficiently insulated between bars to prevent bad grounds.

**Steel Trucks.**—The roller-bearing anti-friction dry-kiln trucks made by the Peacock Iron Works, Selma, Ala., are having an extensive sale throughout the South, and are being used in many of the leading mills of the country on account of superior construction. They are manufactured in all sizes, from seven to eighteen feet long, and are not affected by heat, cold or dampness, nor do they warp or break either in or out of the kiln. They are lighter than wood, and are shipped set up, ready for use. Carrying capacity is guaranteed to be three times actual requirements; every part is of steel except the wheels and spreaders, which are of the best iron. The axles and roller bearings are made of the finest finished steel. The maker will send a set of them to responsible parties, and if not found satisfactory will stand freight charges one way. Up to this time it is said none have ever been returned.

## TRADE LITERATURE.

**Roebling Price-List.**—The revised price-list of cast-steel switching ropes made by the John A. Roebling's Sons Co. of Trenton, N. J., has been issued. This leaflet applies to page 20 of the new wire-rope catalogue.

**Electric Apparatus.**—A neat booklet issued by the Electrical Material Co., 221 North Calvert street, Baltimore, describes the varied and complete line of electrical goods handled by it. Edison and Westinghouse are the most important people represented.

**Lakes of Oil.**—Lakes of oil are no rarity at this time in Texas. A half-tone picture illustrating the 110,000-barrel earthen reservoir of the German-American Oil Co. in Beaumont, which is being circulated, is a good advertisement for this company and the State of Texas.

**An Automobile?**—If so, send to the Westinghouse Electric & Manufacturing Co., East Pittsburgh, for its catalogue on automobile supplies. In no line of goods is cheap stuff so to be avoided as in electrical supplies. In

this, as in most other cases, the best is the cheapest.

**Crocker-Wheeler Motors.**—It may be that every family will some day own and operate for the thousand and one little conveniences of the home a small electric motor. Crocker-Wheeler Company, Amper, N. J., is hastening this time. Its attractive little booklet, "Small Power Motors," will further enlighten anyone interested.

**Osborn Brushes and Brooms.**—A maker of brushes, brooms, foundry supplies and hardware specialties on the broadest lines is the Osborn Manufacturing Co., 1331 Hamilton street, Cleveland, Ohio. Its catalogue of 150 pages, profusely illustrated, describes product. This company claims that many specialties shown in the book are not made by competing firms.

**Jeffrey Screens.**—Catalogue No. 69, dealing with all forms of screening machinery made by the Jeffrey Manufacturing Co., Columbus, Ohio, has been issued. This company makes a variety of screens for use with all sharp, hard and gritty materials, and special machinery, such as conveyors, bucket elevators, sand and gravel excavators, mortar and concrete mixers.

**Hardwood Flooring.**—The best material to put into a hardwood floor is not the only thing to consider. How to lay and finish this good material, which is the best material in the first place, and the best preparation to use in its care, are essentials clearly brought out by a little booklet issued by the T. Wilce Company, Twenty-second and Throop streets, Chicago.

**"Mining Machines."**—Under this title the Herzer and Henninger Machine Works, Belleville, Ill., offers its full line of the latest patented improvements in coal-mining machinery. This catalogue contains the result of knowledge gained by years of experience and studying all different makes of coal cutters while undergoing repairs in the Henninger shops. The company's coal-cutting machinery has stood the test of hard use, and is said to be entirely satisfactory.

**About Asbestos.**—The fact that the United States government used "Gladiator" asbestos, metallic sheet packing and gaskets made by the New Jersey Asbestos Co. of Camden, N. J., on the great run of the Oregon around Cape Horn is an eloquent testimonial of the merits of this product. This statement and many more equally convincing and interesting can be in the hands of anyone who will write to this company for its catalogue on asbestos. Very good asbestos reading it is, too.

**Springs and Rail Bonds.**—All electric car companies should have bonded tracks. This bonding should be well done. The American Steel & Wire Co. of Worcester, Mass., is issuing a very interesting catalogue on this subject, which may be had for the asking. This company also manufactures extension springs, compression springs, torsion springs and flat springs—all kinds of springs, in fact, into which it is guaranteed only the best of material enters. A booklet on this subject is also available.

**Engine Lathes.**—It is well for a manufacturing firm to have a specialty—to devote brains, energy and ceaseless labor to the development and absolute perfection of one thing, just as it is well for a man to give his life to undivided labor along one good line. The handsome illustrated catalogue of Schumacher & Boye, Cincinnati, Ohio, specialists on engine lathes alone, in which line this firm has achieved notable success, is an attractive pamphlet, and should be in the hands of every good machinist.

**The Gravity Dam.**—In order to meet their rapidly-increasing business the firm of E. R. Beardsley & Son of Waldron, Ill., have organized and chartered Beardsley Gravity Dam & Construction Co., with a capital stock of \$100,000, and have moved their offices from Waldron, Ill., to Elkhart, Ind., 205 South Main street. As heretofore, the business will be conducted under the supervision of E. R. Beardsley & Son, and the construction of the "Beardsley" gravity dam and power plants will be a specialty. They are prepared to build or construct any or all kinds of hydraulic work, electric-light plants, docks, piers, ditches and waterways of all kinds. The company has in its employ a corps of experienced hydraulic, mechanical, electrical and civil engineers, and is prepared to make preliminary and final surveys of streams, determine area of their flood lands, estimate their horse-power efficiency, and prepare plans and estimates for development of the same. This company's trade catalogue, "The Gravity Dam," is a beautiful piece of work.

## FINANCIAL NEWS.

The Manufacturers' Record invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

## Review of the Baltimore Market.

Office Manufacturers' Record,

Baltimore, Md., June 4.

There was a fair amount of activity in the Baltimore stock market during the week, notwithstanding that a double holiday made quite a break in the trading. United Railways issues were the feature of interest next after Baltimore city stock, which was being sought by financial institutions that desired to receive part of the Western Maryland purchase money on deposit. Two facts conspired to develop renewed interest in United Railways issues, one being the increased demand for first-mortgage 4s by financial institutions for purpose of deposit with the State in place of Baltimore city stock, which was so greatly in demand for deposit with the city as security for the Western Maryland moneys; the other cause was the payment of the June interest on the income bonds, the result being that there was considerable speculation in the railway securities. There was little doing in the common stock.

The movement in Seaboard securities was limited, and displayed no particular feature. Cotton Duck issues were also quiet, and other stocks and bonds in the speculative list were generally inclined to stagnation. The stock of the Maryland & Pennsylvania Railroad continued to advance, rumors being persistent that outside interests were endeavoring to obtain control of the property.

In the trading United Railways common stock sold at from 15½ to 16. The income bonds, prior to the payment of the June interest, sold at from 71¼ to 71½, and after the payment they declined to 70, and then to 69½. The first-mortgage 4 per cents advanced from 95½ to 96½. Cotton Duck common was dealt in at 10 and 10¼, the incomes at 46½, and the first-mortgage 5s at 78¼ and 79¼. Seaboard common moved between 25¼ and 25½; the preferred sold at 45½ and 45¾; the 4 per cent. bonds at 85½ to 86, and the ten-year 5s at 102½ and 103¼. United Light & Power preferred changed hands at 41¼ and 41½, and the 4½ per cent. bonds at 85. Consolidated Gas stock sold at from 67½ to 68; the 5 per cent. bonds at 116½, and the 6 per cent. bonds at 114½. G. B. & S. Brewing common was traded in at 16 and 17; the income bonds at from 41¼ to 42¼, and the first-mortgage bonds at 52.

The trust-company stocks were quiet. Mercantile sold at 167½ and 168, International at 123, Union at 64, Fidelity & Deposit at 106, United States Fidelity & Guaranty at 146, and Maryland Casualty at 49½ and 49¾. Mechanics' Bank stock sold at 31½, Citizens' at 33½, Third National at 121½, and Union Bank at 119½.

Maryland & Pennsylvania stock sold between 27¼ and 29, and the 4 per cent. bonds at 99. Northern Central stock sold at 116½ up to 117½; Norfolk Railway & Light stock between 13¼ and 13¾. Savannah, Florida & Western 6s sold at 129½, and the 5s at 116. City & Suburban 5s of Washington were dealt in at 94½ and 95; Charlotte, Columbia & Augusta 1sts, 122½; Georgia & Alabama consols, 114 and 114¼; Georgia Southern & Florida 5s, 115½; Anacostia & Potomac 5s, 96; Georgia Southern & Florida first preferred stock, 100¼; Georgia, Carolina & Northern 5s, 113½; Wilmington & Weldon 5s, 122½; Norfolk Street Railway

5s, 114½; Atlantic Coast Line of Connecticut, 250; Charleston Consolidated Electric 5s, 89; Lexington Street Railway 5s, 100½ and 101; Consolidation Coal, 80; South Bound 5s, 112; Georgia Pacific 1sts, 129; Charleston City Railway 5s, 106½; and George's Creek Coal, 116.

## SECURITIES AT BALTIMORE.

Last Quotations for the Week Ended June 4, 1902.

Railroad Stocks.	Par.	Bid.	Asked
Atlanta & Charlotte.....	100	168	172
Georgia Southern & Florida.....	100	48	...
Georgia Sou. & Fla. 1st Pref.....	100	100	100½
Georgia Sou. & Fla. 2d Pref.....	100	81	85
United Railways & Elec. Co.....	50	15½	16
Seaboard Railway Common.....	100	25½	25¾
Seaboard Railway Preferred.....	100	45½	46
Atlantic Coast Line of Comm.....	100	245	255

Bank Stocks.	Par.	Bid.	Asked
Citizens' National Bank.....	10	33½	34
Commercial & Far. Nat. Bank.....	100	128	...
German Bank.....	100	168	...
Mechanics' National Bank.....	100	135	240
National Bank of Baltimore.....	100	132	135
National Bank of Commerce.....	15	28	32
National Howard Bank.....	10	11½	...
National Marine Bank.....	30	30½	...
National Mechanics' Bank.....	10	31½	33
National Union Bank of Md.....	100	118½	119½
Second National Bank.....	100	189	...
Third National Bank.....	100	121½	122

Trust, Fidelity and Casualty Stocks.	Par.	Bid.	Asked
Fidelity & Deposit.....	50	167	...
International Trust.....	100	122½	123½
Maryland Casualty.....	25	49	50½
Maryland Trust.....	100	215	...
Mercantile Trust & Deposit.....	50	166	169
U. S. Fidelity & Guaranty.....	100	145½	146

## Miscellaneous Stocks.

G. B. & S. Brewing Co.....	100	15	17
United Elec. L. & P. Pref.....	50	41	42
Cotton Duck Voting Trust.....	100	57½	101½
Consolidation Coal.....	100	80	...
George's Creek Coal.....	100	118½	119½
Consolidated Gas.....	100	67½	...
Atlantic Transport.....	100	250	270

## Railroad Bonds.

Atlanta & Charlotte 1st 7s, 1907.....	114½	115½	116
Georgia, Car. & North. 1st 5s, 1929.....	113½	114	115
Georgia South. & Fla. 1st 5s, 1945.....	115½	116	117
Georgia Pacific 1st 6s, 1923.....	128	129½	130
Petersburg, Class A 5s, 1926.....	116	...	...
Petersburg, Class B 6s, 1926.....	128	...	...
Piedmont & Cum. 1st 5s, 1911.....	109	...	...
Raleigh & Augusta 1st 6s, 1929.....	123	...	...
Richmond & Danville 1st 6s, 1915.....	112	...	...
Savannah, Fla. & West. 5s, 1934.....	116	...	...
Seaboard & Roanoke 6s, 1916.....	112½	...	...
Seaboard & Roanoke 5s, 1926.....	115½	117	...
Southern Railway Co. 5s, 1994.....	122	...	...
Virginia Midland 1st 6s, 1906.....	107½	...	...
Virginia Midland 2d 6s, 1911.....	114½	...	...
Virginia Midland 3d 6s, 1916.....	120	...	...
Virginia Midland 4th 2-4s, 1921.....	114	...	...
Virginia Midland 5th 5s, 1928.....	116	...	...
West. North Carolina Co. 6s, 1914.....	120	121½	122½
West Virginia Central 1st 6s, 1911.....	115½	115½	116
Wilmington, Col. & Ang. 6s, 1910.....	113½	...	...
Wilmington & Wel. Gold 5s, 1935.....	123½	123½	124
Charleston City Railway 5s, 1923.....	106½	107½	108
Charleston Co. Electric 5s, 1909.....	88½	89	90
Knoxville Traction 1st 5s, 1928.....	103½	104	105
Newport News & Old P. 5s, 1928.....	103½	104	105
Norfolk Street Railway 5s, 1944.....	114	115	116
United Railways 1st 4s, 1949.....	95½	96	97
United Railways Inc. 4s, 1949.....	69	69½	70
Seaboard 4s.....	85½	86	87
Seaboard 10-year 5s.....	102	103½	104
Georgia & Alabama Co. 5s.....	114	114½	115
South Bound 5s.....	117	118	119

## Miscellaneous Bonds.

Mt. V. & Woodby's Cot. Duck 5s.....	70	...	...
Mt. V. & Woodby's Cot. Duck Inc.....	46	48½	49
G. B. & S. Brewing 1st 2-4s.....	52	52½	53
G. B. & S. Brewing 2d Income.....	41½	42	43
United Elec. Light & Power 4½s.....	84½	85	86
Consolidated Gas 6s, 1910.....	114½	115	116
Consolidated Gas 5s, 1939.....	116½	116½	117

## Nashville Railway Report.

The bondholders' committee of the Nashville Railway Co. has issued a statement. An issue of \$500,000 of 6 per cent. receivers' certificates is proposed, and \$350,000 of them has been placed, while the remainder, it is stated, can be placed as wanted. The location of the powerhouse is to be changed, and it is possible that more than the original estimate of \$500,000 may be expended. The gross earnings for the last half of 1901 were \$391,456. The three months ended March 31, 1902, show an increase of \$17,891 in gross earnings over the corresponding period of 1901. It is estimated that the gross earnings will be \$850,000 a year. The ratio of operating expenses is calculated at from 50 to 60 per cent., and the higher figure would leave \$340,500 of net earnings, while the interest on underlying bonds amounts to \$146,020; interest on the proposed receivers' certificates, \$30,000, and taxes, \$78,716, making a total of \$254,736, which leaves \$85,764. It is estimated that \$40,000 more in net earnings can be added in the near future, making a total of \$125,764, which would be applicable towards paying interest on the \$2,300,000 of consolidated bonds of which the February, 1901, coupons are unpaid

and are accruing. It is further stated by the committee that at least the remainder of this year will be required to complete the work proposed, and not until it is finished can a proper plan of reorganization be considered.

## Annuity Paid to a State.

The Northern Central Railway Co. has paid to the State of Maryland \$190,420.94 in settlement of the arrearages of annuity due by the company to the State. This settlement is the result of a long legal contest, which ended with a decision rendered by the United States Supreme Court in favor of the State of Maryland. The annuity, which was \$90,000 a year, was given to the State for a debt of \$1,500,000 owed by the Baltimore & Susquehanna Railroad Co., which was the predecessor of the Northern Central. The latter gave the annuity forty-eight years ago, with the privilege of buying it within ten years for \$1,500,000, the amount of the original debt.

Two years ago the company offered to pay off the annuity by tendering the State \$1,500,000 in gold. This was refused, the State holding that as the annuity was not redeemed within ten years it could not be redeemed unless the State consented. Consent was denied because the State deemed the annuity a good investment. Counsel for the railroad insisted that it had the right to pay off the lien, claiming that a mortgage was always redeemable. The attorney-general of the State contended that a mortgage hinging on an annuity was not redeemable except by consent, and this contention was sustained.

## Mississippi's Finances.

Governor Longino of Mississippi is quoted as stating that it will not be necessary for him to take advantage of the authority conferred by the legislature to issue \$1,000,000 worth of bonds, or as much thereof as would be required to complete the new State capitol at Jackson. The auditor of the State estimates that the coming tax assessment will show an increase of \$12,000,000 or more, and that the revenues of the State will be in such a condition as to provide all the money needed for finishing the building. There are now in the treasury \$967,000, and of this amount about \$725,000 will be disbursed by October 1, leaving a balance of \$242,000. It is further stated that the monthly allowance on the new capitol is rarely as much as \$40,000, and that with the beginning of the new fiscal year on October 1 the receipt of revenues will begin again in sufficient quantity to meet all demands.

## Stock and Bonds to Be Issued.

The stockholders of the St. Louis Southwestern Railway have approved the recommendation of the directors to increase the common stock by a new issue amounting to \$18,500,000. This makes the total issue of common stock \$35,000,000, and there is also \$20,000,000 of 5 per cent. preferred stock outstanding. The shareholders also approved an issue of \$25,000,000 of bonds to be used for the acquisition of part or all of \$10,000,000 of second mortgage gold income bond certificates outstanding, besides equipment obligations; also to provide for buying additional equipment and the purchase or construction of branches and extensions, as well as for the betterment of the property of the company. The purchase of the Stuttgart & Arkansas River Railway was likewise ratified.

## Purchased by a Bank.

Negotiations have been completed for the purchase of the stock of the Baltimore Warehouse Co. by the First National

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Bank of Baltimore, the price being \$25.50 per share, the par of each being \$20, and the total number of shares 17,500. All stockholders are given until October 1 opportunity to accept the offer and deposit their stock, and it is stated that already nearly two-thirds of the stock has been pledged. The Warehouse Company has a profitable business of lending money on warehouse receipts. Charles A. Foote is its president, and George G. Atkinson, secretary.

## New Corporations.

It is reported that another bank will be started at Spartanburg, S. C.

A bank has been organized at Locust Grove, Ga., by F. S. Etheridge and others; capital \$25,000.

The Adrian Banking Co. of Adrian, Ga., has been incorporated by R. M. Rogers and others; capital \$25,000.

The First Savings Bank of West Point, Miss., has been incorporated, with \$25,000 capital, by J. A. McArthur and others.

The Bank of Parnell of Parnell, Okla., has been incorporated, with \$5000 capital, by N. Whitacre and others of Chandler.

The Home Investment & Loan Co. of Dallas, Texas, has been incorporated, with \$10,000 capital, by John Catto and others.

[For Additional Financial News, See Pages 36 and 37.]



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